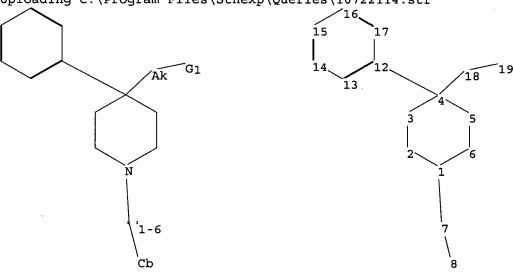
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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>

Uploading C:\Program Files\Stnexp\Queries\10722114.str



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G1:0,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:CLASS 19:CLASS

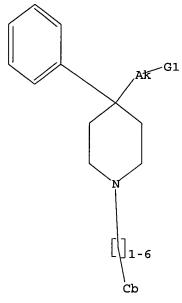
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L1 HAS NO ANSWERS

L1

STR



G1 0, S

Structure attributes must be viewed using STN Express query preparation.

=> s l1 ful

FULL SEARCH INITIATED 15:55:40 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 177611 TO ITERATE

100.0% PROCESSED 177611 ITERATIONS

1615 ANSWERS

SEARCH TIME: 00.00.02

L2 1615 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY 166.94 SESSION 167.15

FILE 'CAPLUS' ENTERED AT 15:55:53 ON 08 FEB 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 8 Feb 2006 VOL 144 ISS 7 FILE LAST UPDATED: 7 Feb 2006 (20060207/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s 12

L3 685 L2

=> file registry COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 1.84 168.99

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 15:58:20 ON 08 FEB 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 FEB 2006 HIGHEST RN 873775-18-9 DICTIONARY FILE UPDATES: 7 FEB 2006 HIGHEST RN 873775-18-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

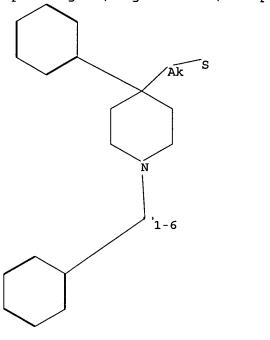
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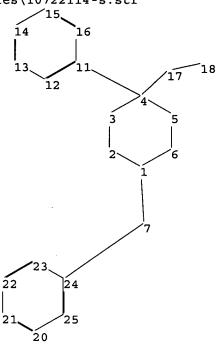
08/02/2006

Page 4

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=>
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chain nodes : 7 17 18 ring nodes : 1 2 3 4 5 6 11 12 13 14 15 16 20 21 22 23 24 25 chain bonds : 1-7 4-11 4-17 7-24 17-18 ring bonds : $1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 11-12 \quad 11-16 \quad 12-13 \quad 13-14 \quad 14-15 \quad 15-16 \quad 20-21 \quad 20-25$ 21-22 22-23 23-24 24-25 exact/norm bonds : 1-2 1-6 1-7 2-3 3-4 4-5 4-17 5-6 17-18 exact bonds : 4-11 7-24 normalized bonds : 11-12 11-16 12-13 13-14 14-15 15-16 20-21 20-25 21-22 22-23 23-24 24-25 isolated ring systems :

G1:0,S

Match level :

containing 1 : 11 :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS 18:CLASS 20:CLASS 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom

L4 STRUCTURE UPLOADED

=> d 14

L4 HAS NO ANSWERS

STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s 14

SAMPLE SEARCH INITIATED 15:58:47 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -5103 TO ITERATE

39.2% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.03

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

COMPLETE BATCH

PROJECTED ITERATIONS:

97777 TO 106343

PROJECTED ANSWERS:

0 TO 0

1.5

0 SEA SSS SAM L4

=> s 14 ful

FULL SEARCH INITIATED 15:58:55 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 101466 TO ITERATE

100.0% PROCESSED 101466 ITERATIONS

26 ANSWERS

335.93

SEARCH TIME: 00.00.02

26 SEA SSS FUL L4

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL

ENTRY SESSION 166.94

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 15:58:59 ON 08 FEB 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 8 Feb 2006 VOL 144 ISS 7 FILE LAST UPDATED: 7 Feb 2006 (20060207/ED)

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Ι

http://www.cas.org/infopolicy.html

=> s 16

L7 5 L6

=> d abs fbib hitstr 1-5

L7 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN GI

AB Title compds. I [Z = 0, (un)substituted-N; R1 = substituted alkyl; R2-R5 = H, alkyl, haloalkyl, etc.; R6 = H, alkyl, haloalkyl, etc.; R7, R8 = H, alkyl, haloalkyl, acyl, carboxy, etc.] are prepared For instance, 2-(4-fluorobenzyl)-8-hydroxy-6-methyl-2,3,4,4a,5,6-hexahydro-2,6-naphthyridine-1,7-dione is prepared in 7 steps from 4-fluorobenzyl bromide, 2-piperidinone, Me phenylsulfinate, nitromethane and Et oxalyl chloride. Most example compds. exhibit IC50 values of 1 μ M or less for HIV integrase. I are useful in the prevention and treatment of infection by HIV and in the prevention, delay in the onset, and treatment of AIDS. I can be employed in pharmaceutical compns., optionally in combination with other antivirals, immunomodulators, antibiotics or vaccines.

AN 2005:1026845 CAPLUS

DN 143:326342

TI Preparation of substituted naphthyridines as HIV integrase inhibitors

IN Morrissette, Matthew M.; Williams, Peter D.; Wai, John S.; Fisher, Thorsten E.; Lyle, Terry A.

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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PATENT NO.
                         KIND
                                DATE
                                           APPLICATION NO.
                                                                  DATE
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     WO 2005086700
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                                           WO 2005-US7106
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                                                                   20050304
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08/02/2006

RN

Page 7

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US 2004-551440P P 20040309

OS MARPAT 143:326342

IT 865088-52-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of substituted naphthyridines as HIV integrase inhibitors) 865088-52-4 CAPLUS

CN 4-Piperidinecarbothioamide, 1-[(4-fluorophenyl)methyl]-2-oxo-4-phenyl-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S & O & \\ \hline \\ H_2N-C & \\ \hline \\ Ph & \\ \end{array}$$

L7 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN GI

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB Title compds. [I; X = C1-8 alkyl, alkylenecycloalkyl, alkylenearyl, alkyleneheteroaryl, etc.; X = C1-8 alkyl, alkylenecycloalkyl, alkylenearyl, alkyleneheteroaryl, etc.; R1 = H, C1-8 alkyl, alkylenecycloalkyl, alkylenearyl, alkyleneheteroaryl; Q = amino-tetrahydronaphthyl, amino-benzocycloheptyl, methylaminotetrahydronaphthyl, aminoindanyl, amino-benzothiopyranyl, amino-1,4-dihydro-1,4-methanonaphthyl, etc.; n = 0, 1, 2], stereoisomers, and pharmaceutically acceptable salts are prepared as agonists of the human melanocortin receptors and, in particular, as selective agonists of the human melanocortin-4 receptor (MC-4R). Title compds. I are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity, diabetes, sexual dysfunction, including erectile dysfunction and female sexual dysfunction. Pharmaceutical composition including title compds. I and second active ingredient are claimed. Thus, the title compound II was prepared from 4-F-D-Phe-4-cyclohexyl-piperidine-4-carboxylic acid Et ester HCl salt and cis-1,2,3,4-tetrahydro-1-tert-butoxycarbonyl-naphthalene-2-carboxylic acid, which was prepared from 1,2-dihydroaphthalene, ClSO2NCO.

AN 2002:157581 CAPLUS

- DN 136:216648
- TI Preparation of substituted piperidines as melanocortin receptor agonists
- IN Bakshi, Raman K.; Barakat, Khaled J.; Lai, Yingjie; Nargund, Ravi P.; Palucki, Brenda L.; Park, Min K.; Patchett, Arthur A.; Sebhat, Iyassu; Ye, Zhixiong
- PA Merck & Co., Inc., USA

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PCT Int. Appl., 128 pp.
SO
     CODEN: PIXXD2
DT
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LA
     English
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     PATENT NO.
                        KIND
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                                          APPLICATION NO.
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                                                                   20030127
     US 6767915
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                                20040727
                                            US 2000-227180P
                                                                Ρ
                                                                   20000823
                                            WO 2001-US25757
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OS
    MARPAT 136:216648
TΤ
     401915-36-4P 401915-38-6P 401915-41-1P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of substituted piperidines as melanocortin receptor agonists)
ΡN
     401915-36-4 CAPLUS
CN
     1,4-Methanonaphthalene-2-carboxamide, 3-amino-N-[(1R)-1-[(4-
     chlorophenyl) methyl] -2-[4-[[(1-methylethyl)thio]methyl]-4-phenyl-1-
     piperidinyl]-2-oxoethyl]-1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)
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Absolute stereochemistry.

RN 401915-38-6 CAPLUS

CN 1,4-Methanonaphthalene-2-carboxamide, 3-amino-N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[[(1-methylethyl)sulfinyl]methyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]-1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 401915-41-1 CAPLUS

CN 1,4-Methanonaphthalene-2-carboxamide, 3-amino-N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[[(1-methylethyl)sulfonyl]methyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]-1,2,3,4-tetrahydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Piperidine derivs. I [R2C2 = aryl, 5- or 6-membered heteroaryl or heterocyclyl, 5- to 7-membered carbocyclyl, which may be substituted; L = (CRb2)m, where Rb = H, alky1, (CH2)n-cycloalky1 or -ary1; m = 0-2, n = 00-3; X, Y = (CH2)0-2; Ra = H, alkyl, (CHRb)n-cycloalkyl, -aryl, -heteroaryl, -O(CHRb)naryl, which may be substituted; Re = H, alkyl, (CH2)n-aryl, -cycloalkyl, -heteroaryl, which may be substituted, acyl, sulfonyl, etc.; R1 = H, alkyl, (CH2)n-cycloalkyl, -aryl, -heteroaryl, -heterocyclyl; R2 = any group given for R1, CN, (CH2)n-carboxamido, -carboxy, -acylamino, sulfonylamino, -amino, etc.] were prepared as agonists of the human melanocortin receptors, in particular, the human melanocortin-4 receptor (MC-4R). They are therefore useful for the treatment, control, or prevention of diseases and disorders responsive to the activation of MC-4R, such as obesity, diabetes, sexual dysfunction, including erectile dysfunction and female sexual dysfunction. Thus, II trifluoroacetate, prepared by coupling of Et 1-(D-4-chlorophenylalanyl)-4cyclohexyl-4-[(1,2,4-triazol-1-yl)methyl]piperidine trifluoroacetate (preparation given) with

N-tert-butoxycarbonyl-1,2,3,4-tetrahydroisoquinoline-3carboxylic acid (Boc-D-Tic), was > 2,200-fold, > 10,000-fold, and > 580-fold selective for the human MC-4R over human MC-1R, MC-2R, and MC-3R, resp.

AN 2000:880962 CAPLUS

DN 134:42445

TI Preparation of piperidine amino acid derivatives as melanocortin-4 receptor agonists

IN Bakshi, Raman K.; Barakat, Khaled J.; Nargund, Ravi P.; Palucki, Brenda L.; Patchett, Arthur A.; Sebhat, Iyassu; Ye, Zhixiong; Van, Der Ploeg Leonardus H. T.

PA Merck & Co., Inc., USA; Van Der Ploeg, Leonardus H. T.

SO PCT Int. Appl., 124 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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PATENT NO.
                                        APPLICATION NO.
                      KIND
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                                                              DATE
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                              20001214 WO 2000-US14930
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OS MARPAT 134:42445

IT 312637-61-9P 312637-63-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of piperidine amino acid derivs. as melanocortin-4 receptor agonists)

RN 312637-61-9 CAPLUS CN 3-Isoquinolinecarbo

3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[[(1-methylethyl)thio]methyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]-1,2,3,4-tetrahydro-, (3S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 312637-60-8

CMF C34 H40 Cl N3 O2 S

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 312637-63-1 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[[(1-methylethyl)thio]methyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]-1,2,3,4-tetrahydro-, (3R)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 312637-62-0 CMF C34 H40 Cl N3 O2 S

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

IT 312638-54-3P 312638-56-5P 312638-59-8P 312638-60-1P 312638-61-2P 312638-62-3P

CN

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperidine amino acid derivs. as melanocortin-4 receptor agonists)

RN 312638-54-3 CAPLUS

3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[[(1-methylethyl)sulfinyl]methyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]-1,2,3,4-tetrahydro-, (3S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 312638-53-2 CMF C34 H40 Cl N3 O3 S

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 312638-56-5 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[[(1-methylethyl)sulfinyl]methyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]-1,2,3,4-tetrahydro-, (3R)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 312638-55-4 CMF C34 H40 Cl N3 O3 S

Absolute stereochemistry.

08/02/2006

Page 14

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 312638-59-8 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[[(1-methylethyl)sulfonyl]methyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]-1,2,3,4-tetrahydro-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 312638-60-1 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[[(1-methylethyl)sulfonyl]methyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]-1,2,3,4-tetrahydro-, (3S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 312638-59-8 CMF C34 H40 Cl N3 O4 S Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 312638-61-2 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[[(1-methylethyl)sulfonyl]methyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]-1,2,3,4-tetrahydro-, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 312638-62-3 CAPLUS

CN 3-Isoquinolinecarboxamide, N-[(1R)-1-[(4-chlorophenyl)methyl]-2-[4-[[(1-methylethyl)sulfonyl]methyl]-4-phenyl-1-piperidinyl]-2-oxoethyl]-1,2,3,4-tetrahydro-, (3R)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 312638-61-2 CMF C34 H40 Cl N3 O4 S

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

IT 312639-25-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of piperidine amino acid derivs. as melanocortin-4 receptor agonists)

RN 312639-25-1 CAPLUS

CN Piperidine, 1-[(2R)-2-amino-3-(4-chlorophenyl)-1-oxopropyl]-4-[[(1-methylethyl)thio]methyl]-4-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

HCl

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L7 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN
- GI For diagram(s), see printed CA Issue.
- AB Seventeen title derivs. I.HCl (R = heteroaryloxy, substituted phenoxy, amino, hydrazino, alkoxy, and alkylthio) diarrhea inhibitors which also counteract the withdrawal symptoms associated with chronic psychotropic drug intoxication (no data), were prepared from the title acid I (R = OH). I possess analgesic, antiprotozoal, antibacterial, antifungal, and anthelmintic activity (no data).
- AN 1974:505305 CAPLUS
- DN 81:105305
- TI 1-(3-cyano-3,3-diphenylpropyl)-4-phenyl-piperidine-4-carboxylic acid derivatives
- IN Briggs, Frederick B.
- PA G.D. Searle and Co.
- SO Brit., 11 pp. Division of Brit. 1,356,117.
 CODEN: BRXXAA
- DT Patent
- LA English
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	GB 1356118	Α	19740612	GB 1971-57390	19701216
				GB 1971-57390	A 19701216

- IT 37983-42-9P 37983-43-0P 53405-30-4P
- RN 37983-42-9 CAPLUS
- CN 4-Piperidinecarbothioic acid, 1-(3-cyano-3,3-diphenylpropyl)-4-phenyl-, S-(2,4-dichlorophenyl) ester, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} Ph \\ | \\ NC - C - CH_2 - CH_2 \\ | \\ Ph \end{array} \begin{array}{c} O \\ | \\ C - S \end{array} \begin{array}{c} C1 \\ | \\ C1 \end{array}$$

● HCl

RN 37983-43-0 CAPLUS

CN 4-Piperidinecarbothioic acid, 1-(3-cyano-3,3-diphenylpropyl)-4-phenyl-, S-(phenylmethyl) ester, monohydrochloride (9CI) (CA INDEX NAME)

08/02/2006

$$\begin{array}{c} \text{Ph} \\ \text{CH}_2\text{--}\text{CH}_2\text{--}\text{C--}\text{CN} \\ \text{N} \\ \text{Ph} \\ \text{Ph} - \text{CH}_2\text{--}\text{s--}\text{C} \\ \text{Ph} \\ \text{O} \end{array}$$

HCl

RN 53405-30-4 CAPLUS

CN 4-Piperidinecarbothioic acid, 1-(3-cyano-3,3-diphenylpropyl)-4-phenyl-, S-(2-furanylmethyl) ester, monohydrochloride (9CI) (CA INDEX NAME)

L7 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

GI For diagram(s), see printed CA Issue.

Eighteen title compds. [I, e.g. R = 2-pyridyloxy, 2-pyridylmethoxy, 2,4,5-Cl3C6H2O (II), 3,4-Me(MeS)C6H3I, 2,4-Cl2C6H3S, PhCH2S, phthalimidomethoxy, Me2NNH, 4-MeOC6H4NH and (or) their mono- or dihydrochlorides, useful as antidiarrheal drugs, were prepared by reaction of I (R = OH or Cl) with RH. Thus, 2,4,5-Cl3C6H2OH and dicyclohexylcarbodiimide were added to I (R = OH) in DMF and the mixture was stirred 24 hr to give II.

AN 1972:539819 CAPLUS

DN 77:139819

TI 1-(3-Cyano-3,3-diphenylpropyl)-4-phenyl-4-piperidinecarboxylic acid derivatives

IN

Kreider, Eunice M. S. PΑ G.D. Searle and Co. SO Ger. Offen., 35 pp. CODEN: GWXXBX DT Patent LA German FAN.CNT 2 KIND DATE PATENT NO. APPLICATION NO. DATE ------------------------PΙ DE 2161827 19720706 A DE 1971-2161827 19711213 A 19701216 GB 1970-59686 Α GB 1356117 19740612 GB 1970-59686 19701216 CA 947296 A1 19740514 CA 1971-129748 19711209 GB 1970-59686 A 19701216 BE 776644 A1 19720613 BE 1971-111627 19711213 A 19701216 GB 1970-59686 BE 776645 A1 19720613 BE 1971-111628 19711213 GB 1970-59686 A 19701216 19720620 NL 7117061 Α NL 1971-17061 19711213 GB 1970-59686 A 19701216 NL 7117062 Α NL 1971-17062 19720620 19711213 GB 1970-59686 A 19701216 FR 2118060 A5 19720728 FR 1971-44705 19711213 19751031 FR 2118060 B1 A 19701216 GB 1970-59686 FR 2118061 A5 19720728 FR 1971-44706 19711213 FR 2118061 B1 19751010 GB 1970-59686 A 19701216 AU 1971-36783 AU 7136783 A1 19730614 19711213 A 19701216 GB 1970-59686 AU 7136784 A1 19730614 AU 1971-36784 19711213 GB 1970-59686 A 19701216 ES 397911 ES 1971-397911 A1 19750416 19711213 A 19701216 GB 1970-59686 ES 397912 ES 1971-397912 A1 19750416 19711213 GB 1970-59686 A 19701216 DK 130966 В DK 1971-6076 19750512 19711213 GB 1970-59686 A 19701216 CH 572037 A 19760130 CH 1971-18174 19711213 A 19701216 GB 1970-59686 CH 572920 Α 19760227 CH 1971-18173 19711213 A 19701216 GB 1970-59686 CH 572922 Α 19760227 CH 1974-16946 19711213 A 19701216 GB 1970-59686 CH 572923 Α 19760227 CH 1974-16947 19711213 A 19701216 GB 1970-59686 DK 136037 В 19770801 DK 1971-6075 19711213 GB 1970-59686 A 19701216 B4 JP 55042996 19801104 JP 1971-100937 19711213 A 19701216 GB 1970-59686 ZA 7108379 Α 19730228 ZA 1971-8379 19711214 A 19701216 GB 1970-59686 ZA 7108380 Α 19730228 ZA 1971-8380 19711214 A 19701216 GB 1970-59686 SE 370542 В 19741021 SE 1971-15978 19711214 GB 1970-59686 A 19701216 SE 370543 В 19741021 SE 1971-15979 19711214 A 19701216 GB 1970-59686

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RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN37983-42-9 CAPLUS

CN 4-Piperidinecarbothioic acid, 1-(3-cyano-3,3-diphenylpropyl)-4-phenyl-, S-(2,4-dichlorophenyl) ester, monohydrochloride (9CI) (CA INDEX NAME)

HC1

RN 37983-43-0 CAPLUS

4-Piperidinecarbothioic acid, 1-(3-cyano-3,3-diphenylpropyl)-4-phenyl-, CN S-(phenylmethyl) ester, monohydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ph} & \\ & \text{CH}_2\text{--}\text{CH}_2\text{--}\text{C} & \text{CN} \\ & & \text{Ph} \\ & & \text{Ph} \\ & & \text{Ph} \\ & & \text{Ph} \\ & & \text{O} \end{array}$$

● HCl

RN 37983-44-1 CAPLUS
CN 4-Piperidinecarbothioic acid, 1-(3-cyano-3,3-diphenylpropyl)-4-phenyl-,
S-2-furanyl ester, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

=> file registry		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	34.62	370.55
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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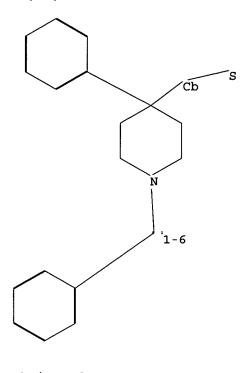
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

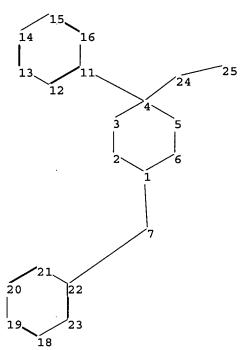
http://www.cas.org/ONLINE/UG/regprops.html

Uploading C:\Program Files\Stnexp\Queries\10722114-cyclo.str

08/02/2006







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G1:0,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 18:CLASS 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:CLASS

L8 STRUCTURE UPLOADED

=> d 18

10722114

L8 HAS NO ANSWERS L8 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

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39.2% PROCESSED 2000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 97777 TO 106343

PROJECTED ANSWERS:

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L9 0 SEA SSS SAM L8

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100.0% PROCESSED 101466 ITERATIONS

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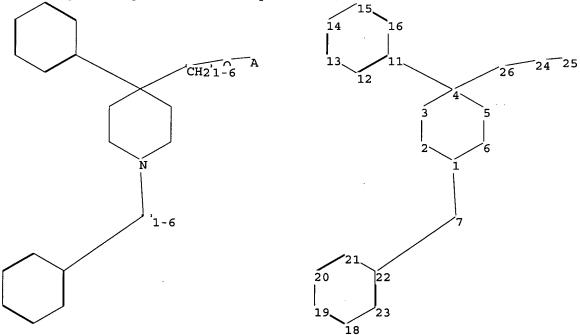
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L10

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Uploading C:\Program Files\Stnexp\Queries\10722114--OR.str



chain nodes : 7 24 25 26

ring nodes :

1 2 3 4 5 6 11 12 13 14 15 16 18 19 20 21 22 23

chain bonds :

1-7 4-11 4-26 7-22 24-25 24-26

ring bonds :

 $1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 11-12 \quad 11-16 \quad 12-13 \quad 13-14 \quad 14-15 \quad 15-16 \quad 18-19 \quad 18-23$

19-20 20-21 21-22 22-23

exact/norm bonds :

1-2 1-6 1-7 2-3 3-4 4-5 5-6 24-25

exact bonds :

4-11 4-26 7-22 24-26

normalized bonds :

11-12 11-16 12-13 13-14 14-15 15-16 18-19 18-23 19-20 20-21 21-22 22-23

isolated ring systems : containing 1 : 11 :

G1:0,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 18:CLASS 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom

24:CLASS 25:CLASS

26:CLASS

L11 STRUCTURE UPLOADED

=> d l11

L11 HAS NO ANSWERS

L11 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s l11

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SAMPLE SCREEN SEARCH COMPLETED - 198 TO ITERATE

100.0% PROCESSED 198 ITERATIONS

48 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 3116 TO 4804 PROJECTED ANSWERS: 545 TO 1375

L12 48 SEA SSS SAM L11

=> s l11 ful

FULL SEARCH INITIATED 16:04:49 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 4562 TO ITERATE

100.0% PROCESSED 4562 ITERATIONS 931 ANSWERS

SEARCH TIME: 00.00.01

L13 931 SEA SSS FUL L11

=> file caplus

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
334.76
705.31

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE

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FILE COVERS 1907 - 8 Feb 2006 VOL 144 ISS 7 FILE LAST UPDATED: 7 Feb 2006 (20060207/ED)

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http://www.cas.org/infopolicy.html

=> s 113

L14 595 L13

=> s 114 and py<2001 20847035 PY<2001

L15 457 L14 AND PY<2001

=> d abs fbib hitstr 400-410

L15 ANSWER 400 OF 457 CAPLUS COPYRIGHT 2006 ACS on STN

AB In crossover expts. in dogs, morphine (0.2 mg./kg. intravenously) did not prolong significantly thiopental-induced sleep time. Meperidine (2 mg./kg.) prolonged sleep slightly. Levorphanol (0.05 mg./kg.), alphaprodine (1 mg./kg.), anileridine (1 mg./kg.), and oxymorphone (0.05 mg./kg.) prolonged steep by 25-50%. Dipipanone (0.5 mg./kg.) and a combination of meperidine with promazine (1 mg./kg. each) prolonged sleep

more than 50%. AN 1962:426160 CAPLUS

DN 57:26160

OREF 57:5257g-h

Prolongation of thiopental-induced sleep in dogs by narcotic analgesics ТT Dobkin, Allen B. ΑU Upstate Med. Center, Syracuse, NY CS SO Anesthesiology (1961) 291-3 CODEN: ANESAV; ISSN: 0003-3022 DT Journal LA Unavailable IT 144-14-9, Isonipecotic acid, 1-(p-aminophenethyl)-4-phenyl-, ethyl (thiopental anesthesia prolongation by) RN144-14-9 CAPLUS 4-Piperidinecarboxylic acid, 1-[2-(4-aminophenyl)ethyl]-4-phenyl-, ethyl ester (9CI) (CA INDEX NAME)

L15 ANSWER 401 OF 457 CAPLUS COPYRIGHT 2006 ACS on STN AB The Me, Et, and iso-Pr esters of 3β -methyl-4-phenylpiperidine-4carboxylate were prepared (cf. preceding abstract) and treated with PhCH:CHCH2Cl to give the title compds. (ester group and m.p. of HCl salt given): Me, 193-4°; Et, 205.5-6.0°; iso-Pr, 177.6-8.2°. The title compds. are analgesics and have barbiturate-potentiating and hypnotic activity and also have low mydriatic activity. 1962:66862 CAPLUS AN 56:66862 DN OREF 56:12861g-h Lower-alkyl esters of 1-cinnamyl-3-methyl-4-phenylpiperidine-4-carboxylic TI acid ÌΝ Janssen, Paul A. J. DT Patent LA Unavailable PATENT NO. KIND APPLICATION NO. DATE DATE ____ -----______ -----US 3012030 PΙ 19611205 US 19600429 <--107157-04-0, Isonipecotic acid, 1-cinnamyl-3 β -methyl-4-phenyl-IT , ethyl ester

L15 ANSWER 402 OF 457 CAPLUS COPYRIGHT 2006 ACS on STN AΒ The title compds. are highly potent analgesic agents and also have barbituratepotentiating and hypnotic activity. The designation 3α -methyl indicates the cis arrangement of the 3-methyl and the 4-ester group on the piperidine ring while the 3β - is the trans configuration. 2-Hydroxyethyl-2-hydroxypropylamine, Na2CO3, and H2O are heated to 70°, p-MeC6H4SO2Cl added, and the mixture heated at 95° for 1 hr. The cooled mixture was filtered and the residue extracted with Et20. Removal of the Et20 and purification of the residue from iso-PrOH gave N-(2-hydroxyethyl)-N-(2-hydroxypropyl)-p-toluenesulfonamide (I), m. 66.2-8.2°. The OH groups of I were replaced by Cl upon reaction with SOC12 to yield N-(2-chloroethyl)-N-(2-chloropropyl)-ptoluenesulfonamide (II). Refluxing II with PhCH2CN and NaNH2 gave 1-(4-methylphenylsulfonyl)- 3α -methyl-4-phenyl-4-cyanopiperidine (III) (MeOH-soluble), m. 143.5-6°, and the 3β -methyl derivative (IV) (MeOH-insol.), m. 217-18°. III gave 1-(4-methylphenylsulfonyl)- 3α -methyl-4-phenylpiperidine-4-carboxylic acid (V) (m. 173.4-5.8°) when refluxed with KOH in HOCH2CH2OH. Similar treatment of IV gave the 3β -methyl compound (VI), m. 209.5-11.4°. VI with excess SOCl2 gave the corresponding carboxylic acid chloride which was treated with MeOH to give Me 1-(4-methylphenylsulfonyl)-3β-methyl-4-phenylpiperidine-4-carboxylate (VII), m. 137.4-40.3°. Similar treatment of V gave the $3\alpha\text{-methyl}$ derivative (VIII), m. 94.5-5.4°. When EtOH replaced the MeOH, the corresponding Et ester derivs. of the $3\alpha\text{-methyl}$ compound (IX), m. 127.8-8.2°, and 3β -methyl compound (X), m. 102-4.6°, were obtained. Iso-PrOH gave the iso-Pr esters: 3α -methyl (XI), m. 99-101.5°, and 3β -methyl (XII), m. 112.5-3.2°. The tosyl moiety was removed from VII, IX, and XI by treatment with a mixture of PhOH and HOAc saturated with HBr to give the resp. alkyl 3α-methyl-4-phenylpiperidine-4-carboxylates [alkyl group and b.p. (mm.) given]: Me, 122-3° (0.02); Et, - (oxalate m. 136.2-7.4°); iso-Pr, 136° (0.6). A similar treatment of VII, X, and XII gave the corresponding 3β -methyl compds. (alkyl group, b.p. (mm.), and m.p. HCl salt given): Me (XIII), 131-3° (0.4), 191-2.2°; Et (XIV), 126° (0.2), 175.6-6.2°; iso-Pr (XV), 124-6° (0.02), -. The hydrochlorides of XIII, XIV, and XV underwent a Mannich condensation with paraformaldehyde and PhCOMe to give the resp. alkyl 1-(2-benzoylethyl)-3β-methyl-408/02/2006

Page 30

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phenylpiperidine-4-carboxylate hydrochlorides (alkyl group and m.p. of HCl
     salt given): Me, 198-8.8°; Et (XVI), 179.7-82.4°; iso-Pr,
     178.4-9.4°. XVI was converted to the free base and reduced with
     NaBH4 to Et 1-(3-phenyl-3-hydroxypropyl)-3β-methyl-4-phenylpiperidine-
     4-carboxylate (HCl salt m. 196.6-7.4°).
AN
     1962:66861 CAPLUS
DN
     56:66861
OREF 56:12861a-q
    Lower alkyl esters of 1-(2-benzoylethyl) - and 1-(3-hydroxy-3-phenylpropyl) -
     3-methyl-4-phenylpiperidine-4-carboxylic acid
IN
     Janssen, Paul A. J.
DT
     Patent
     Unavailable
LA
FAN.CNT 1
     PATENT NO.
                        KIND
                                DATE
                                           APPLICATION NO.
                                                                  DATE
                        ----
PΙ
    US 3004977
                                19611017 US
                                                                   19600429 <--
                                            US
                                                                   19600429
    13543-77-6, Isonipecotic acid, 1-(3-hydroxy-3-phenylpropyl)-3-
IT
     methyl-4-phenyl-, ethyl ester, hydrochloride 95438-91-8,
     Isonipecotic acid, 1-(2-benzoylethyl)-3-methyl-4-phenyl-, methyl ester,
     hydrochloride 95624-80-9, Isonipecotic acid,
     1-(2-benzoylethyl)-3-methyl-4-phenyl-, ethyl ester, hydrochloride
     95820-10-3, Isonipecotic acid, 1-(2-benzoylethyl)-3-methyl-4-
     phenyl-, isopropyl ester, hydrochloride 107157-04-0,
     Isonipecotic acid, 1-cinnamyl-3β-methyl-4-phenyl-, ethyl ester
     857363-59-8, Isonipecotic acid, 1-(2-benzoylethyl)-3-methyl-4-
     phenyl-, ethyl ester, oxalate
        (preparation of)
RN
     13543-77-6 CAPLUS
CN
     Isonipecotic acid, 1-(3-hydroxy-3-phenylpropyl)3-methyl-4β-phenyl-,
     ethyl ester, hydrochloride (8CI) (CA INDEX NAME)
```

HCl

HCl

RN 95624-80-9 CAPLUS
CN Isonipecotic acid, 1-(2-benzoylethyl)-3-methyl-4-phenyl-, ethyl ester, hydrochloride (7CI) (CA INDEX NAME)

● HCl

RN 95820-10-3 CAPLUS
CN Isonipecotic acid, 1-(2-benzoylethyl)-3-methyl-4-phenyl-, isopropyl ester, hydrochloride (7CI) (CA INDEX NAME)

HCl

RN 107157-04-0 CAPLUS CN Isonipecotic acid, 1-cinnamyl-3 β -methyl-4-phenyl-, ethyl ester (7CI) (CA INDEX NAME)

RN 857363-59-8 CAPLUS
CN Isonipecotic acid, 1-(2-benzoylethyl)-3-methyl-4-phenyl-, ethyl ester, oxalate (7CI) (CA INDEX NAME)

CM 1

CRN 805191-56-4 CMF C24 H29 N O3

$$\begin{array}{c|c} O & O \\ \parallel & \parallel \\ E \text{to-} C & \downarrow \\ P h & Me \end{array}$$

CM 2

CRN 144-62-7 CMF C2 H2 O4

L15 ANSWER 403 OF 457 CAPLUS COPYRIGHT 2006 ACS on STN

GI For diagram(s), see printed CA Issue.

AB I (Z = nicotinoyl) were prepared, where R and R' = alkyl radicals containing 1-8

C atoms. Nicotinoyl chloride-HCl (68 g), 46.4 g. 3.3-dimethylazetidine, and 500 ml. anhydrous CHCl3 treated slowly dropwise with 200 ml. Et3N at 0° , the mixture heated 1 hr. at 50° , poured into 600 ml. H2O,

the organic layer separated, the aqueous layer extracted with CHCl3, and the combined

organic solns. fractionated gave 51 g. I (R = R' = Me), b0.6 130-5°. The I were powerful analeptic agents.

AN 1962:66860 CAPLUS

DN 56:66860

OREF 56:12860h-i,12861a

TI 1-Nicotinoylazetidines

IN Testa, Emilio; Maffii, Guilo

PA Lepetit S.p.A.

DT Patent

LA Unavailable

FAN.CNT 1

PATENT NO. KIND APPLICATION NO. DATE DATE ---------------_ _ _ _ PΙ GB 879883 19611011 GB 19590805 <--GB 19590805

IT 95437-02-8, Isonipecotic acid, 1-benzyl-4-phenyl-, butyl ester
95940-83-3, Isonipecotic acid, 1-benzyl-4-phenyl-, isopropyl ester
(preparation of)

RN 95437-02-8 CAPLUS

CN Isonipecotic acid, 1-benzyl-4-phenyl-, butyl ester (7CI) (CA INDEX NAME)

RN 95940-83-3 CAPLUS

CN Isonipecotic acid, 1-benzyl-4-phenyl-, isopropyl ester (7CI) (CA INDEX

NAME)

L15 ANSWER 404 OF 457 CAPLUS COPYRIGHT 2006 ACS on STN

GI For diagram(s), see printed CA Issue.

AB Alkyl 1-carbamoylalkyl-4-phenylpiperidine-4-carboxylates are prepared by addition of piperidine across the double bond of an acrylamide or by N-alkylation of a piperidine with cyanoalkyl halides followed by hydrolysis of the nitrile to the amide. The compds. showed antitussive and analgesic activity. Thus, 26.9 g. Et 4-phenylpiperidine-4-carboxylate-HCl (I.HCl) was covered with Et20 and shaken with 45 cc. 10% aqueous NaOH solution The Et20 layer and 7.1 g. acrylamide was heated on a steam bath for 1 hr. after the Et20 had evaporated The solid residue was dissolved in 300 cc. hot iso-PrOH, filtered, acidified with HCl gas, cooled, and treated with Et20. The crystalline product was collected and washed with Et20 to give II (R1, R2, R3 = H, R4 = Et), m. 179.8-82.7°. Similarly prepared from the appropriate acrylamide and piperidine carboxylate were II (R1, R2, R3, R4, m.p. given): tert-Bu, H, H, Et, 159.6-61.5°; n-hexyl, H, H, Et, 106.4-9.8°; 4-MeOC6H4, H, H, Et, -(ethanesulfonate m. 128.8°); 4-ClC6H6, H, H, Et, 219.8-21.2°; Et, Ph, H, Et, 150-1.2°; PhCH2, H, H, Et, -[102.2-4.2° (free base)]; cyclohexyl, H, H, Et, 191.0-2.8°; allyl, H, H, Et, 172.8-4.2°; 4-MeOC6H4C2H4, H, H, Et, 136.8-8.0°; PhCH2CH2, H, H, Et, 177.2-8.4°; PhCH2, Me, H, Et, 172.4-2.8°; Me, Me, H, Et, 181.8-3.4° Et, H, H, Et, 188.4-90.0°; Ph, H, H, Et, 204.6-8.4°; Et, Et, H, Et, 171-3.6°; H, H, Me, Et, 201.4-2.6°; Me, H, H, Et, 153.2-60.1°; iso-Pr, iso-Pr, H, Et, 136.8-40.6°; H, H, H, Me, 210.2-10.6°; H, H, H, iso-Pr, 196-7.6°; H, H, H, Bu, 193.2-4.8°; Me, Ph, H, Et, 86-8° (free base); Me, Ph, H, Et, 164-4.8°; H, H, H, n-hexyl, -; Bu, H, H, Et, -; Et, Me, H, Et,-; 2-naphthyl, H, H, Et, -; 2-biphenylyl, H, H, Et, -; 2-furyl, Me, H, Et, -; 3-pyridyl, H, H, Et, -; 2-thienyl, Pr, H, Et, -; 2-pyrimidyl, Me, H, Et, -; Ph, Ph, H, Et, -; 4-ClC6H4, Ph, H, Et, -; 3-EtOC6H4, Me, H, Et, -; 2-MeC6H4, H, H, Et, -; 2,4-ClEtOC6H5, H, H, Et, -; 3,4,5-(MeO)3C6H2, H, H, Et, -; 4-BuNHC6H4, H, H, Et, -; 4-AcNHC6H4, H, H, Et, -; 4-EtSC2C6H4, H, H, Et, -; 4-EtSC2C6H4, H, H, Et, -; 4-H2NC6H4, Me, H, Et, -; 2-thiazolyl, H, H, Et, -. Also prepared were II where P3 - H, P4 - Ft, and NP1P3 were the following covaling were II where R3 = H, R4 = Et, and NR1R2 were the following cyclic moieties: 2-methylpiperidino, m. 182.6-4.4°; pyrrolidino, m. 183.8-5.4°; morpholino, m. 217.6-18.8°; piperidino, m. 189.2-91.2%. A mixture of I (from 26.9 g. of its HCl salt) in 200 cc. EtOH, 10 cc. C5H5N, and 10.3 g. of 3-cyanopropyl chloride was refluxed 12 hrs. and evaporated The residue was dissolved in iso-PrOH-HCl. Dilution with Et20 gave a precipitate of 10.1 g. III (n = 3) (IIIa), m. 183-6°. Similarly

prepared was III (n = 4) (IIIb), m. 107.2° (softens). IIIa (10.1 g.)

was converted to the free base, dissolved in 50 cc. concentrated ${\tt H2SO4}$, and ${\tt kept}$

1 day. The mixture was diluted with ice and H2O, basified with NaOH and extracted

with Et2O. The extract was evaporated and the residue was dissolved in iso-PrOH-HCl, and diluted with Et2O to give 6.5 g. IV (n = 3, R = H), m. $186.2-8.4^{\circ}$. Similarly prepared was IV (n = 4, R = H). IV (n = 6, R = Me) was prepared from I.HCl and 6-(N-methylcarbamoyl)hexyl chloride as in the method for II. III (n = 2) (IIIc), m. $200-2.5^{\circ}$, was prepared from I and acrylonitrile as in the preparation of II, which was hydrolyzed to IV (n = 2, R = H). Brit. 880,140. The prepns. of IIIa, IIIb, and IIIc are described.

AN 1962:66859 CAPLUS

DN 56:66859

OREF 56:12860a-h

TI Substituted piperidines

PA Sterling Drug Inc.

DT Patent

LA Unavailable

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	GB 880139		19611018	GB		<
				US	19580430	
	US 3117128		1964	US		<
IT	95437-02-8, Isonip	ecotic a	cid, 1-benzy	l-4-phenyl-, butyl	ester	

IT 95437-02-8, Isonipecotic acid, 1-benzyl-4-phenyl-, butyl ester
95940-83-3, Isonipecotic acid, 1-benzyl-4-phenyl-, isopropyl ester
(preparation of)

RN 95437-02-8 CAPLUS

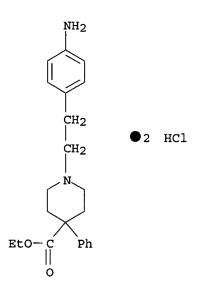
CN Isonipecotic acid, 1-benzyl-4-phenyl-, butyl ester (7CI) (CA INDEX NAME)

RN 95940-83-3 CAPLUS

CN Isonipecotic acid, 1-benzyl-4-phenyl-, isopropyl ester (7CI) (CA INDEX NAME)

L15 ANSWER 405 OF 457 CAPLUS COPYRIGHT 2006 ACS on STN Changes in tooth pulp threshold in rabbits following oral and subcutaneous AB administration of codeine, morphine, levorphan, and anileridine showed approx. equal relative potencies for the first 3 while the last was approx. 1/2 that of the others. 1962:56966 CAPLUS AN 56:56966 OREF 56:10866a-b Oral versus subcutaneous potency of codeine, morphine, levorphan, and anileridine as measured by rabbit tooth pulp changes Leaders, Floyd E.; Keasling, H. H. ΑU Univ. of Iowa, Iowa City CS Journal of Pharmaceutical Sciences (1962), 51, 46-9 SO CODEN: JPMSAE; ISSN: 0022-3549 DTJournal LA Unavailable 126-12-5, Isonipecotic acid, 1-(p-aminophenethyl)-4-phenyl-, ethyl IT ester, dihydrochloride (analgesic activity of, route of adminstration in relation to) RN126-12-5 CAPLUS 4-Piperidinecarboxylic acid, 1-[2-(4-aminophenyl)ethyl]-4-phenyl-, ethyl CN

ester, dihydrochloride (9CI) (CA INDEX NAME)

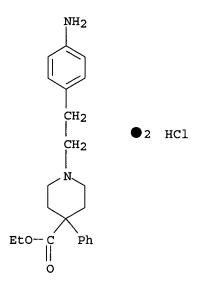


L15 ANSWER 406 OF 457 CAPLUS COPYRIGHT 2006 ACS on STN

AB Pyrogallol (I) (1-50 mg./kg.), intravenously in dogs, caused decreased duodenal activity in 1-2 min. (resembling the effect of 1-2 mg./kg. adrenaline) and increased the rat contractions in 2-10 min., and the tonus in 15-40 min. Effects of I were increased by tolazoline (5 mg./kg.), phentolamine (10 mg./kg.), yohimbine, and dichloroisoprenaline (3 mg./kg.); decreased by atropine (100%) and by histamine (short time); and mepyramine or hexamethonium were without effect. Large doses of neostigmine counteracted the effect of atropine.

AN 1962:56965 CAPLUS

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56:56965
DN
OREF 56:10865h-i,10866a
    Effect of pyrogallol on duodenal motility
TI
ΑU
     Izquierdo, Ivan; Izquierdo, Juan A.
CS
     Fac. Farm. Bioquim., Buenos Aires
SO
     Journal of Pharmacy and Pharmacology (1961), 13, 743-6
     CODEN: JPPMAB; ISSN: 0022-3573
DT
     Journal
    Unavailable
LA
     126-12-5, Isonipecotic acid, 1-(p-aminophenethyl)-4-phenyl-, ethyl
TТ
     ester, dihydrochloride
        (analgesic activity of, route of adminstration in relation to)
RN
     126-12-5 CAPLUS
     4-Piperidinecarboxylic acid, 1-[2-(4-aminophenyl)ethyl]-4-phenyl-, ethyl
CN
     ester, dihydrochloride (9CI) (CA INDEX NAME)
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ANSWER 407 OF 457 CAPLUS COPYRIGHT 2006 ACS on STN 1.15 The following drugs possess an addiction-forming or -sustaining liability AB similar to morphine: β -methadol, etoxeridine {Et 1-[2-(2hydroxyethoxy)ethyl]-4-phenyl-4-piperidinecarboxylate} (Atenorax, Atenos, Carbetidine), levomoramide, (1-3-methyl-2,2-diphenyl-4morpholinobutyrylpyrrolidine), racemoramide, trimeperidine (1,2,5-trimethyl,4-phenyl-4-propionoxypiperidine) (Promedol), and phenoperidine [Et 1-(3-hydroxy-3-phenylpropyl)-4-phenyl-4piperidinecarboxylate]. AN 1961:133624 CAPLUS DN 55:133624 OREF 55:25163h-i TΙ Finding of certain drugs to be opiates ΑU Federal Register (1961), 26, 7760-1, 19 Aug 1961 SO CODEN: FEREAC; ISSN: 0097-6326 DТ Journal LA Unavailable IT 562-26-5, Isonipecotic acid, 1-(3-hydroxy-3-phenylpropyl)-4-phenyl, ethyl ester
 (as narcotic)
RN 562-26-5 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-(3-hydroxy-3-phenylpropyl)-4-phenyl-, ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ph} & \\ | & \\ | & \\ \text{EtO-C} & \\ \hline \text{Ph} & \\ \end{array}$$

L15 ANSWER 408 OF 457 CAPLUS COPYRIGHT 2006 ACS on STN The title carbinol, Ph(EtO2C)C5H8NCH2CH2CH(OR)Ph(I, R = H)(II), was prepared for pharmacol. evalution since it should exhibit greater stability than the corresponding ketone (III), a Mannich base with analgesic properties, and its resolution could lead to a separation of analgesic and respiratory depressant activities. III HCl salt (12.0 g.) in 48 ml. 50% alc. and 1.2 g. NaOH in 72 ml. alc. stirred 10 min. at 20° with 1.1 g. NaBH4, diluted with CHCl3, the washed and dried CHCl3 extract distilled, and the crystalline residue, m. 89-91°, in 60 ml. Me2CHOH treated with 6.6 ml. 6.8N HCl in Me2CHOH gave 96% material, recrystd. from Me2CHOH to give dl-II HCl salt, m. 198-9 $^{\circ}$. II (3.7 g.) in 40 ml. C5H5N and 10 ml. Ac20 heated on a steam bath briefly and kept 16 hrs. at 20°, excess Ac20 decomposed with H2O, the solution taken up in Et2O, and the product on evaporation treated with 1.3 g. maleic acid in Et20 gave 94% product, recrystd. to give I (R = Ac) H maleate salt (IV), m. 137-9°. Similarly, 3.7 g. II and 3.9 g. (EtCO) 20 yielded I (R = EtCO) H maleate salt (V), m. 142-3°. II (3.7 g.) in 20 ml. C5H5N kept 3 hrs. with 3.5 ml. 1-menthoxyacetyl chloride with occasional swirling, the clear cold solution (ice bath) treated with 2 ml. H2O and diluted with Et2O, the product from evaporation of the washed and dried Et20 extract taken up in 15 ml. EtOAc and heated with 1.4 g. maleic acid, the filtered solution concentrated, and the residue

treated with 50 ml. dry Et 20 yielded 93% salt, m. 79-86°, [α]D -30°, crystallized (50 g.) from 150 ml. alc. and 2.5 ml. to give 9.2 g. material, m. 137-9°, recrystd. from 18 ml. alc. and 450 ml. Et20 to yield 33% I (R = menthoxyacetyl) 1,1-hydrogen maleate (VI), m. 139-40°, [α]D -50° (1% MeOH). The optically pure VI (6.8 g.) in 70 ml. MeOH hydrolyzed with 2.8 g. KOH in 35 ml. 80% MeOH 15 min. at 20° and the solution diluted with 200 ml. H2O gave the free base $(3.7 \text{ g., m. } 83-4^{\circ})$, recrystd. from dilute MeOH to yield 1-II, m. 86.0-6.5°, $[\alpha]D$ -21°, acidified (1.1 g.) in 5 ml. Me2CHOH with 1 ml. 6.8N HCl in Me2CHOH to give 0.9 g. salt, m. 187-8°, crystallized from 5 ml. Me2CHOH to yield 67% 1-II HCl salt, m. 187-8°, $[\alpha]D$ -23°. l-II (1.1 g.) kept 16 hrs. at 20° in 10 ml. C5H5N and 5 ml. Ac2O, excess Ac2O decomposed with 5 ml. H2O, taken up in Et2O and the washed and dried Et2O layer added to 0.4 g. maleic acid in 0.8 ml. MeOH and 10 ml. Et2O, filtered from 1.5 g. product, m. 141-2°, and crystallized from 5 ml. alc. and 75 ml. Et20 yielded 87% l-IV, m. 142-3°, $[\alpha]\,D$ -22°. Similarly, use of (EtCO) 20 gave 80% l-V, m. 143-4°, $[\alpha]D$ -23°. Acylation of 35.0 g. II with 22.1 g. d-menthoxyacetyl chloride yielded,

after fractional crystallization, 49% optically pure I (R = menthoxyacetyl) d,d-hydrogen maleate (VII), m. 138.0-8.5°, [α]D 50°, hydrolyzed (13.6 g.) to give 5.2 g. d-II HCl salt, m. 186-7°, $[\alpha]D$ 25°. l-II (1.9 g.) acetylated, the oily ester taken up in 100 ml. dry C6H6 and refluxed 5 hrs. with BrCN, C6H6 removed, the residue refluxed 5 hrs. with 0.8 g. LiAlH4 in 100 ml. dry tetrahydrofuran, excess LiAlH4 destroyed with EtOAc, the mixture treated with dilute HCl and Et20, the residue on evaporation of the Et20 layer heated 2 hrs. on a steam bath with 1.0 ml. α-C10H7NCO, excess reagent destroyed with 90% aqueous Me2CO, the residue on evaporation taken up in ligroine (b. 60-80°) and chromatographed over 20 g. silica gel, the column washed with 500 ml. 1:1 C6H6-ligroine and eluted with C6H6, and the fraction crystallized from ligroine gave 0.8 g. needles, m. 113-15°, recrystd. from ligroine to give $1-\alpha$ -C10H7NHCO2CHPhEt, m. 116-17°, [α]D -31.5°, also produced by conversion of 1-HOCHPhEt (VII) to the urethan. A duplicate experiment using 3.7 g. racemic base gave $dl-\alpha$ -C10H7NHCO2CHPhEt, m. 102-3° (ligroine). VII had the S configuration and 1-II was S-1-(3-hydroxy-3-phenylpropyl)-4-ethoxycarbonyl-4-phenylpiperidine. The analgesic potencies in mice are listed (morphine = 1): dl-II HCl, 14; dl-IV, 8; dl-V 14; l-II HCl, 25; l-IV, 11; l-V, 14; d-II, HCl, 7. An increase in analgesic activity was accompanied by an approximately corresponding increase in respiratory depression. 1961:131266 CAPLUS AN 55:131266 DN OREF 55:24744d-i,24745a-c Resolution and configuration of 1-(3-hydroxy-3-phenylpropyl)-4ethoxycarbonyl-4-phenylpiperidine ΑU Mazur, Robert H. CS G. D. Searle & Co., Chicago SO Journal of Organic Chemistry (1961), 26, 962-4 CODEN: JOCEAH; ISSN: 0022-3263 DT Journal LA Unavailable 124119-16-0, Propionic acid, ester, with Et 1-(3-hydroxy-3-IT phenylpropyl) -4-phenylisonipecotate (preparation of) RN124119-16-0 CAPLUS CN 4-Piperidinecarboxylic acid, 1-[3-(1-oxopropoxy)-3-phenylpropyl]-4-phenyl-, ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ph} & \text{O} \\ & | & | \\ & | \\ \text{CH}_2-\text{CH}_2-\text{CH}-\text{O}-\text{C}-\text{Et} \\ \\ & | \\ & | \\ & \text{EtO}-\text{C} & \text{Ph} \\ & | \\ & | \\ & \text{O} \end{array}$$

L15 ANSWER 409 OF 457 CAPLUS COPYRIGHT 2006 ACS on STN
AB The piperidines were prepared by the following sequence of reactions:

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4-phenyl-4-carbethoxypiperidine carbonate (I) and a \beta-(p-
     aminophenyl)ethyl halide gave N-(p-aminophenethyl)-4-phenyl-4-
     carbethoxypiperidine (II), which was then treated with an acid to give the
     corresponding salt, or with an acylating agent to give the corresponding
     p-acylamino derivative, which can then be converted to its salt. Thus, 7.8 q.
     p-aminophenylethyl chloride-HCl, 12.5 g. I, 10.5 g. Na2CO3, and 100 cc.
     anhydrous EtOH was refluxed with stirring 40 hrs., then concentrated in vacuo
     dryness, the residue was triturated with 50 cc. H2O, decanted, washed by
     decantation with 50 cc. H2O, and then dried in vacuo to give II.2HCl
     (III), m. 275-7°. II, prepared from 1 g. III, 2 cc. glacial HOAc,
     and 2 cc. Ac20 heated on a steam bath 1 hr., kept overnight at room
     diluted with 25 cc. H2O, excess Na2CO3 added portionwise, the aqueous layer
     decanted from the gummy precipitate, and the precipitate washed with H2O, and
dried in
     vacuo gave N-(p-acetamidophenethyl)-4-phenyl-4-carbethoxypiperidine; HCl
     salt m. 264-5°. The mono-HCl salt, m. 218-20°, of II was
     prepared from II and an equimolar quantity of ethanolic HCl.
     p-Aminophenethyl chloride-HCl was prepared as follows: 69 g. fuming HNO3 was
     added slowly to 111 g. Ac20 and 66 g. HOAc at 0°, the mixture cooled
     to -5°, and 101 g. phenethyl bromide added over 2 hrs. with
     stirring between -10° and 0°, the mixture stirred 2-3 hrs.
     below 0°, poured into a suspension of 145 g. Na2CO3 in 1100 cc. ice
     H2O, the product extracted with C6H6, the extract washed with excess Na2CO3
     solution, then with H2O, dried over MgSO4, the solvent evaporated in vacuo, and
     the residue crystallized from petr. ether to give about 55 g. p-nitrophenethyl
     bromide (IV), m. 65-7°. Then, 43 g. IV was added to 172 g. SnCl2,
     in 430 cc. concentrated aqueous HCl over 45 min., the mixture then warmed 45
min., the
     aqueous solution decanted, cooled, 750 cc. of 30% aqueous NaOH solution added,
and the
     resulting solution extracted with Et2O, the extract washed with H2O and 3.5N
aqueous HCl
     to give at 0° about 30 g. of a mixture of p-aminophenethyl
     bromide-HCl and p-aminophenethyl chloride-HCl. These compds. were
     analgesics and compared favorably with meperidine.
     1961:81799 CAPLUS
     55:81799
OREF 55:15515d-h
    N-[\beta-(p-Acylaminophenyl)]-4-phenyl-4-carbethoxypiperidines
    Weijlard, John; Pfister, Karl, III
    Merck & Co., Inc.
    Patent
    Unavailable
FAN.CNT 1
    PATENT NO.
                        KIND
                               DATE
                                           APPLICATION NO.
                        ____
                               -----
                                           ______
    US 2969368
                               19610124
                                          US
     57604-00-9, Isonipecotic acid, 1-(p-acetamidophenethyl)-4-phenyl-,
     ethyl ester
        (and its salts)
     57604-00-9 CAPLUS
     4-Piperidinecarboxylic acid, 1-[2-[4-(acetylamino)phenyl]ethyl]-4-phenyl-,
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ethyl ester (9CI) (CA INDEX NAME)

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RN

CN

L15 ANSWER 410 OF 457 CAPLUS COPYRIGHT 2006 ACS on STN Several compds. of the type CH2.CH2.NR.CH2.CH2.CPhCO2Et (I), wherein R = p-XC6H4(CH2)n (Ia) or p-XC6H4CH:CHCH2 (Ib), were prepared and their analgesic properties compared with that of morphine. Thus, 42 g. NH(CH2CH2OH)2 in 200 ml. 2N Na2CO3 was gradually treated at 65-70° with 70 g. PhSO2Cl, the mixture cooled 1 hr., acidified, and extracted with AcOEt to yield, after evaporation of the solvent, 72 g. PhSO2N(CH2CH2OH)2 (II), m. 72° (AcOEt-petr. ether); attempted vacuum distillation resulted in dehydration to N-benzenesulfonylmorpholine, b5 184-6°, m. 117-18°. II (5.6 g.) heated 1 hr. at 130° with 5.6 ml. SOC12 gave 5.6 g. PhSO2N(CH2CH2Cl)2 (III), m. 42.5°. NaNH2 (from 2.76 g. Na and 150 ml. liquid NH3) treated dropwise with 7.03 g. PhCH2CN in 30 ml. PhMe and then at 30-2° with 16.9 g. III in 90 ml. PhMe and the mixture kept 12 hrs., then refluxed 1 hr., cooled, hydrolyzed, and filtered yielded 7 g. PhSO2N.CH2.CH2.CPh(CN).CH2.CH2 (IV), m. 163-4°. IV (5.82 g.) refluxed with 4.5 ml. H2SO4 and 2.5 ml. H2O till complete dissolution, treated portionwise with 24 ml. H2O, and purified with active C yielded 4.1 g. PhSO2N.CH2.CH2. CPh(CO2H).CH2.CH2 (V), m. 227-8° (H2O). V (3.3 g.) was refluxed 3 hrs. with 10 ml. EtOH and 2 ml. H2SO4 and the mixture treated with 35 ml. H2O and made strongly alkaline with 40% NaOH; distillation of an Et2O extract yielded 1.56 g. Et

4-phenylisonipecotate (VI), b3.5 155-6°, hydrochloride m. 132-3°; VI was converted to the carbonate (VII) (1.72 g.) by saturating the Et20-solution with CO2. A suspension of 12.84 g. VII in 150 ml. EtOH was refluxed 7 hrs. with 11.6 g. p-O2NC6H4(CH2)2Br in 150 ml. EtOH, and 6.34 g. NaHCO3, filtered, and concentrated to yield 12.45 g. Ia (n = 2, X = NO2) (VIII), m. 108-9° (EtOH). Ib (X = H) (IX), m. 210-11°, and Ib (X = NO2) (X), m. 127-8°, were prepared analogously in 38 and 71.6% yields, resp. VIII (3.55 g.) in 200 ml. EtOH hydrogenated 45 min. in the presence of skeletal-Ni catalyst and a few drops of aqueous H2PtCl6 gave, after filtration, concentration, and acidification with alc. HCl, 3.17 g. Ia.2HCl (n = 2, X = NH2), m. 245-7° (XI). Similar hydrogenation yielded from IX 66% Ia.2HCl (n = 3, X = NH2) (XII), m. 221-3°, and

from X 50% Ia (n = 3, X = H) (XIII), m. 161-3° (AcOEt). When the catalyst was Ni alone, IX was hydrogenated to 70.8% Ib (X = NH2) (XIV), m. 182-4° (Me2CO-H2O 1:9). p-O2NC6H4CH:CHCH2Cl, m. 58-60° (iso-PrOH), used in preparing IX, was obtained when 5.8 g. p-nitrocinnamyl alc. in 40 ml. CCl4 was treated at 10-15° with 1.5 g. PCl3 in 10 ml. CCl4, refluxed 3 hrs., washed with NaOH, and concentrated; the yield was 4.4 g. Analgesic activity of XI and XII was equal to that of morphine, of XIII and XIV doubled, and of X 7-fold greater. AN 1961:70662 CAPLUS 55:70662 OREF 55:13421d-i,13422a ΤI N-(Arylalkyl)-4-phenylisonipecotic acid esters ΑU Smirnova, N. V.; Arendaruk, A. P.; Smolin, D. D.; Skoldinov, A. P. Meditsinskaya Promyshlennost SSSR (1958), 12 (No. 7), 31-5 SO CODEN: MPSSA9; ISSN: 0369-1586 DTJournal T.A Unavailable IT 126-12-5, Anileridine, dihydrochloride 102558-22-5, Isonipecotic acid, 1-cinnamyl-4-phenyl-, ethyl ester, hydrochloride 102655-00-5, Isonipecotic acid, 1-p-nitrocinnamyl-4-phenyl-, ethyl ester 102762-47-0, Isonipecotic acid, 4-phenyl-1-(3phenylpropyl) -, ethyl ester, hydrochloride 113751-64-7, Isonipecotic acid, 1-(p-aminocinnamyl)-4-phenyl-, ethyl ester, dihydrochloride 113862-29-6, Isonipecotic acid, 1-[3-(p-aminophenyl)propyl]-4-phenyl-, ethyl ester, dihydrochloride 114160-43-9, Isonipecotic acid, 1-(p-nitrophenethyl)-4-phenyl-, ethyl ester (preparation of) ΡN 126-12-5 CAPLUS CN 4-Piperidinecarboxylic acid, 1-[2-(4-aminophenyl)ethyl]-4-phenyl-, ethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

RN 102558-22-5 CAPLUS CN Isonipecotic acid, 1-cinnamyl-4-phenyl-, ethyl ester, hydrochloride (6CI) (CA INDEX NAME)

HCl

RN 102655-00-5 CAPLUS
CN Isonipecotic acid, 1-p-nitrocinnamyl-4-phenyl-, ethyl ester (6CI) (CA INDEX NAME)

RN 102762-47-0 CAPLUS
CN Isonipecotic acid, 4-phenyl-1-(3-phenylpropyl)-, ethyl ester, hydrochloride (6CI) (CA INDEX NAME)

● HCl

RN 113862-29-6 CAPLUS
CN Isonipecotic acid, 1-[3-(p-aminophenyl)propyl]-4-phenyl-, ethyl ester, dihydrochloride (6CI) (CA INDEX NAME)

08/02/2006

Page 46

●2 HCl

RN 114160-43-9 CAPLUS
CN Isonipecotic acid, 1-(p-nitrophenethyl)-4-phenyl-, ethyl ester (6CI) (CA INDEX NAME)

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COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
SINCE FILE TOTAL

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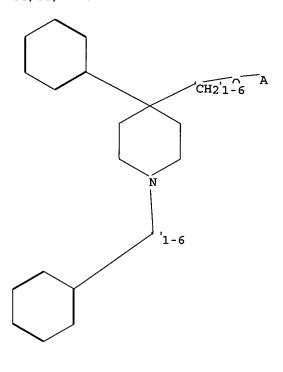
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

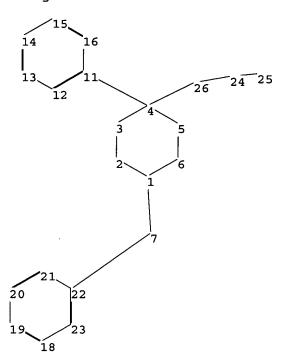
http://www.cas.org/ONLINE/UG/regprops.html

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Uploading C:\Program Files\Stnexp\Queries\10722114--OR.str

08/02/2006

Page 48





chain nodes : 7 24 25 26 ring nodes : 1 2 3 4 5 6 11 12 13 14 15 16 18 19 20 21 22 23 chain bonds : 1-7 4-11 4-26 7-22 24-25 24-26 ring bonds : 1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 18-19 18-23 19-20 20-21 21-22 22-23 exact/norm bonds : 1-2 1-6 1-7 2-3 3-4 4-5 5-6 24-25 exact bonds : 4-11 4-26 7-22 24-26 normalized bonds : 11-12 11-16 12-13 13-14 14-15 15-16 18-19 18-23 19-20 20-21 21-22 22-23 isolated ring systems : containing 1 : 11 :

G1:0,S

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 18:CLASS 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:CLASS 25:CLASS 26:CLASS

L16 STRUCTURE UPLOADED

=> d l16

10722114

L16 HAS NO ANSWERS L16

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s 116

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100.0% PROCESSED 185 ITERATIONS 4 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: PROJECTED ANSWERS:

2884 TO 4516

4 TO 200

L17 4 SEA SSS SAM L16

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FULL SEARCH INITIATED 16:08:08 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 4248 TO ITERATE

100.0% PROCESSED 4248 ITERATIONS 29 ANSWERS

-12.00

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SEARCH TIME: 00.00.01

L18 29 SEA SSS FUL L16

=> file caplus

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=> s 118

L19 21 L18

=> s l19 and PY<2001 20847035 PY<2001

L20 18 L19 AND PY<2001

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L20 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

Anti-pruritic compns. for the prevention or treatment of vaginal pruritus comprise an opiate in a pharmaceutically acceptable carrier. The compns. further comprise a therapeutic agent selected from antibacterial, antiseptic, antibiotic, antiinflammatory, antiparasitic, antiprotozoal, antiviral, and antifungal agent. A pharmaceutically acceptable carrier is a gel, cream, lotion, solution or suspension. For example, 1-(3,3,3-triphenylpropyl)-4-hydroxy-4-p-chlorobenzylpiperidine (1.0, 2.5, and 5.0 mg/kg s.c.) was tested in a mouse scratch model under blind conditions showing a mean inhibition of scratching of 35, 68, and 94%, resp.

AN 2002:163847 CAPLUS

DN 136:205445

TI Peripherally acting anti-pruritic opiates

IN Farrar, John J.; Cowan, Alan

PA Adolor Corp., USA

SO U.S., 16 pp., Cont.-in-part of U. S. 5,849,762.
CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

L. WIA.	CIVI	3					
	PAT	ENT NO.	_	KIND	DATE	APPLICATION NO.	DATE
ΡI	US	6353004	-		20020305		
	TTC	5849762		A	10001015	US 1997-892194 US 1997-892194	
	CA	2346464		AA	20000420	CA 1999-2346464	19990802 <
						US 1998-168724	A 19981009
						WO 1999-US17439	W 19990802
	WO	2000021530		A1	20000420	WO 1999-US17439	19990802 <
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		PT, SI		0-,	, 211, 22,	11, 11, 65, 61, 12,	11, 20, 110, 112,
		,	-			US 1998-168724	A 19981009
	ΔII	9952500		ז א	20000501	AU 1999-52500	
	AU	JJJ2J00		AT.	20000301		
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						WO 1999-US17439	
	EΡ	1119354		A1	20010801	EP 1999-937727	19990802
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						WO 1999-US17439	W 19990802
	BR	9914380		A	20010807	BR 1999-14380	

			20020827	US 1998-168724 WO 1999-US17439 JP 2000-575506 US 1998-168724 WO 1999-US17439	W 19990802 19990802 A 19981009
FAN 19 PA	FAMILY INFOR 98:816107 TENT NO.	KIND		APPLICATION NO.	
	5849762 2288833			US 1997-892194 CA 1998-2288833 US 1997-892194 WO 1998-US12831	19970714 19980619 A 19970714
WO	W: AL, AU IS, JF PL, RO	, BA, BB, , KP, KR,	BG, BR, CA, LC, LK, LR, SK, SL, TR,	WO 1998-US12831 CN, CU, CZ, EE, GE, LS, LT, LV, MG, MK, TT, UA, UZ, VN, YU,	GW, HU, ID, IL, MN, MX, NO, NZ,
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	9878395 725444	A1 B2	19990210 20001012	US 1997-892194 AU 1998-78395	19980619
EP	1019051 R: AT, BE	A1	20000719	US 1997-892194 WO 1998-US12831 EP 1998-926595 GB, GR, IT, LI, LU,	A 19970714 W 19980619 19980619
BR	IE, FI 9810710		20000808	US 1997-892194 WO 1998-US12831 BR 1998-10710 US 1997-892194	W 19980619
NZ	500343	А	20010727	WO 1998-US12831 NZ 1998-500343 US 1997-892194	W 19980619 19980619 A 19970714
JР	2001510157	Т2	20010731	WO 1998-US12831 JP 2000-502771 US 1997-892194 WO 1998-US12831	W 19980619 19980619 A 19970714 W 19980619
	9806207	A		ZA 1998-6207 US 1997-892194 US 1998-168724	19980713 A 19970714
	9906354	B1 A	20020305	US 1997-892194 NO 1999-6354	19981009 A2 19970714 19991220 A 19970714
	00:260010			WO 1998-US12831	W 19980619
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us	PT, SE			FI, FR, GB, GR, IE, US 1998-168724 US 1998-168724 US 1997-892194	A 19981009

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									WO	1999-	US1743:	9	W	19990	0802
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									WO	1999-	US1743	9	W	19990	0802
OS	MΔI	TAGS	136.	2054	45										

OS MARPAT 136:205445

IT 189024-73-5 189024-74-6 189024-80-4

189024-83-7 189024-84-8

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(opiate-containing compns. for prevention or treatment of vaginal pruritus)

RN 189024-73-5 CAPLUS

CN 4-Piperidinemethanol, 4-phenyl-1-(3,3,3-triphenylpropyl)-, acetate (ester) (9CI) (CA INDEX NAME)

RN 189024-74-6 CAPLUS

CN Piperidine, 4-(methoxymethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

RN 189024-80-4 CAPLUS

CN Piperidine, 4-[(hexyloxy)methyl]-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

Me-
$$(CH_2)_5$$
-O- CH_2
Ph

RN 189024-83-7 CAPLUS

CN Piperidine, 4-(2-methoxyethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO-CH}_2\text{-CH}_2\text{-CPh}_3 \\ \text{Ph} \end{array}$$

RN 189024-84-8 CAPLUS

CN Pyridine, 2-[3-[4-(2-methoxyethyl)-4-phenyl-1-piperidinyl]-1,1-diphenylpropyl]- (9CI) (CA INDEX NAME)

RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

AB Anti-pruritic compns. for the prevention or treatment of pruritus comprise e.g., morpholines, piperidines, oxadiazoles, phenylamidinoureas, and 1-azabicyclo[2.2.2]octanes. Thus, rectal suppositories contained loperamide 80, propylene glycol 95, and PEG-4000 1800 g. Loperamide at 2.5 mg/kg antagonized Compound 48/80-induced scratching in a dose-dependent manner, as demonstrated in mice.

AN 2000:260010 CAPLUS

DN 132:298831

TI Peripherally acting anti-pruritic opiates

IN Farrar, John J.; Cowan, Alan

PA Adolor Corporation, USA

SO PCT Int. Appl., 47 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

	C111 5			
	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
ΡI	WO 2000021530	A1 20000420	WO 1999-US17439	19990802 <
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	IL, IN, IS,	JP, KR, LC, LK,	LR, LV, MG, MK, MN, M	X, NO, NZ, PL,
	RO, RU, SG,	SI, SK, SL, TR,	TT, UA, UZ, VN, YU	
	RW: AT, BE, CH,	CY, DE, DK, ES,	FI, FR, GB, GR, IE, I	T, LU, MC, NL,
	PT, SE			
			US 1998-168724	A 19981009
	US 6353004	B1 20020305	US 1998-168724	19981009
			US 1997-892194	A2 19970714

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													8-U		831	V		9980		
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FAN	2002:163847 PATENT NO.		APPLICATION NO.	
ΡI			US 1998-168724	19981009
			US 1997-892194	A2 19970714
	US 5849762	A 19981215	US 1997-892194 CA 1999-2346464	19970714
	CA 2346464	AA 20000420	CA 1999-2346464	19990802
			US 1998-168724	A 19981009
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			US 1998-168724	
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			US 1998-168724	A 19981009
			WO 1999-US17439	W 19990802
	BR 9914380	A 20010807		19990802
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			WO 1999-US17439	W 19990802
	JP 2002527392	T2 20020827	WO 1999-US17439 JP 2000-575506	19990802
			JP 2000-575506 US 1998-168724 WO 1999-US17439	A 19981009
			WO 1999-US17439	W 19990802
os	MARPAT 132:298831			
ΙΤ		84-8 .c use); BIOL (Bio	ological study); USES	G (Uses)
		ting anti-prurit	ic opiates)	
RN CN	189024-73-5 CAPLUS 4-Piperidinemethano (9CI) (CA INDEX NA	ol, 4-phenyl-1-(3	,3,3-triphenylpropyl)	-, acetate (ester)

RN 189024-74-6 CAPLUS

CN Piperidine, 4-(methoxymethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO-CH}_2 & \text{CH}_2\text{-CPh}_3 \\ \text{Ph} \end{array}$$

RN 189024-80-4 CAPLUS

CN Piperidine, 4-[(hexyloxy)methyl]-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me-} (\text{CH}_2)_5 - \text{O-} \text{CH}_2 & \text{Ph} \end{array}$$

RN 189024-83-7 CAPLUS

CN Piperidine, 4-(2-methoxyethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO-CH}_2\text{-CH}_2\text{-CPh}_3 \\ \text{Ph} \end{array}$$

RN 189024-84-8 CAPLUS

CN Pyridine, 2-[3-[4-(2-methoxyethyl)-4-phenyl-1-piperidinyl]-1,1-diphenylpropyl]- (9CI) (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN GI

II

AB Compds. of formula I [wherein: the dotted line represents an optional double bond; X1 = (un) substituted alkyl, cycloalkyl, aryl, heteroaryl or heterocycloalkyl; X2 = CHO, CN, optionally substituted amino, alkyl, or aryl; or X1 = (un) substituted benzofused heterocyclyl and X2 = H; or X1 and X2 together form an optionally benzofused spiro heterocyclyl group; R1, R2, R3 and R4 = independently H and alkyl, or (R1 and R4) or (R2 and R3) or (R1 and R3) or (R2 and R4) together can form an alkylene bridge of 1 to 3 carbon atoms; Z1 = (un)substituted alkyl, aryl, heteroaryl, cycloalkyl or heterocycloalkyl, or CO2(alkyl or substituted amino) or CN; Z2 = H or Z1; Z3 = H or alkyl; or Z1, Z2 and Z3, together with the carbon to which they are attached, form bicyclic saturated or unsatd. rings] or pharmaceutically acceptable salt or solvate thereof useful as nociceptin receptor inhibitors for the treatment of pain, anxiety, cough, asthma, depression, and alc. abuse are disclosed. Compound II showed the Ki value of 13 nM in an in vitro test for ORL-1 receptor binding assay. Formulations are given.

AN 2000:98519 CAPLUS

DN 132:137290

TI Preparation of piperidine derivatives as high affinity ligands for nociceptin receptor ORL-1

IN Tulshian, Deen; Ho, Ginny D.; Silverman, Lisa S.; Matasi, Julius J.; McLeod, Robbie L.; Hey, John A.; Chapman, Richard W.; Bercovici, Ana; Cuss, Francis M.

PA Schering Corporation, USA

SO PCT Int. Appl., 88 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	WO 2000006545	A1	20000210	WO 1999-US14165	19990726 <

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                                      TW 1999-88112624
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                                     EP 2002-18161
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NO 319772
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HK 1034070
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                                                         A 19980727
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                                      WO 1999-US14165
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OS MARPAT 132:137290

IT 256938-06-4P 256938-21-3P 256938-22-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperidine derivs. as high affinity ligands for nociceptin receptor ORL-1)

RN 256938-06-4 CAPLUS

CN Piperidine, 1-(diphenylmethyl)-4-(methoxymethyl)-4-phenyl- (9CI) (CA INDEX NAME)

RN 256938-21-3 CAPLUS

CN Piperidine, 1-(diphenylmethyl)-4-phenyl-4-[(phenylmethoxy)methyl]- (9CI) (CA INDEX NAME)

RN 256938-22-4 CAPLUS

CN Piperidine, 1-(diphenylmethyl)-4-(ethoxymethyl)-4-phenyl- (9CI) (CA INDEX NAME)

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

AB Disclosed are topical film-forming compns. for the prevention and treatment of pruritus containing (1) an opiate that is substantially devoid of central nervous system effects, (2) a film-forming polymeric material, and (3) an aqueous pharmaceutically acceptable carrier. An emulsion contained loperamide HCl 30, ethanol 20, Na Et cellulose sulfate 25, Ca lactate 10, and water q.s. to 100 %.

AN 1999:212693 CAPLUS

DN 130:257341

TI Film-forming compositions of antihyperalgesic opiates and method of

```
treating hyperalgesic and pruritic conditions therewith
IN
     Farrar, John J.; Maycock, Alan L.; Kumar, Virendra; Balogh, Imre Jim
PΑ
     Adolor Corporation, USA
     U.S., 13 pp., Cont.-in-part of U.S. 5,667,773.
so
     CODEN: USXXAM
DT
     Patent
LA
     English
FAN.CNT 3
                                  DATE
                                             APPLICATION NO.
                        KIND
                                                                     DATE
                                  19990330 US 1997-891924 19970714
US 1996-614027 A2 19960312
     US 5888494
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                                                                   19960312 <--
     US 5667773
                          Α
                                  19970916
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                                 19990128 CA 1998-2288204 19980619
US 1997-891924 A 19970714
WO 1998-US12834 W 19980619
19990128 WO 1998-US12834 19980619
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             PL, RO, SG, SI, SK, SL, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, ML, MR, NE, SN, TD, TG
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                                                                W 19980619
19980619
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                                                                   A 19970714
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                                                                   W 19980619
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PATENT FAMILY INFORMATION:
FAN 1997:616927
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                                 DATE APPLICATION NO.
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                                                                     DATE
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PΙ
                                 19970916
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             RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN
         RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
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     AU 715912
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                                 20000210
                                              US 1996-614027 A 19960312
WO 1997-US3315 W 19970226
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	EP 888141 EP 888141 R: DE, FR, GB	B1 20040526		19970226
	US 5888494	A 19990330	US 1996-614027 WO 1997-US3315 US 1997-891924 US 1996-614027	19970714
FAN	1999:77462 PATENT NO.	KIND DATE	APPLICATION NO.	DATE
ΡI	WO 9903455	A1 19990128		
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			TT, UA, UZ, VN, YU,	
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	US 5888494	A 19990330	US 1997-891924	
			US 1996-614027	A2 19960312
	CA 2288204	AA 19990128		
			US 1997-891924	
			WO 1998-US12834	
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	AU 728538	B2 20010111		
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			US 1997-891924	
			WO 1998-US12834	
	JP 2001510152	T2 20010731		19980619
			US 1997-891924	A 19970714
			WO 1998-US12834	
	NO 9906351	A 20000310	NO 1999-6351	19991220
			US 1997-891924 WO 1998-US12834	A 19970714
0.0			WO 1998-US12834	W 19980619
OS IT	MARPAT 130:257341 189024-73-5 189024- 189024-83-7 189024- RL: BAC (Biological	84-8	ector, except adverse	e); BSU (Biologica
			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(topical compns. containing antihyperalgesic opiates and film-forming polymers for treatment of hyperalgesic and pruritic conditions)
189024-73-5 CAPLUS

CN 4-Piperidinemethanol, 4-phenyl-1-(3,3,3-triphenylpropyl)-, acetate (ester) (9CI) (CA INDEX NAME)

RN

RN 189024-74-6 CAPLUS

CN Piperidine, 4-(methoxymethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO-CH}_2 & \text{CH}_2\text{-CH}_2\text{-CPh}_3 \\ \\ \text{Ph} & \end{array}$$

RN 189024-80-4 CAPLUS

CN Piperidine, 4-[(hexyloxy)methyl]-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

Me- (CH₂)₅-0-CH₂
$$\stackrel{N}{\longrightarrow}$$
 N

RN 189024-83-7 CAPLUS

CN Piperidine, 4-(2-methoxyethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \operatorname{MeO-CH_2-CH_2-CPh_3} \\ \end{array}$$

RN 189024-84-8 CAPLUS

CN Pyridine, 2-[3-[4-(2-methoxyethyl)-4-phenyl-1-piperidinyl]-1,1-diphenylpropyl]- (9CI) (CA INDEX NAME)

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN GI

AΒ Title compds. [I; R1 = (substituted) alkyl; R2 = H, OH, alkyl, alkoxy, Ph, NMeCONHMe, NHCO2Me, Ac; R3 = aryl, aralkyl, aralkoxyalkyl, (substituted) aralkoxycarbonylamino, etc.], were prepared for treatment of AIDS (no data). Thus, N-(2-phenyl-4-oxobut-1-yl)-N-methylbenzenesulfonamide (preparation given) was stirred 20 min. with 4-phenylpiperidine, HOAc, and 3Å mol. sieves in THF; Na triacetoxyborohydride was added and the mixture was kept 16 h to give N-[2-phenyl-4-(4-phenylpiperidin-1-yl)but-1-yl]-Nmethylbenzenesulfonamide hydrochloride.

- ΑN 1999:96124 CAPLUS
- DN 130:168242
- TI Preparation of 1-(4-sulfonamidobutyl)piperidines and related compounds as modulators of chemokine receptor activity.
- IN Caldwell, Charles G.; Finke, Paul E.; Maccoss, Malcolm; Meurer, Laura C.; Mills, Sander G.; Oates, Bryan
- PΑ Merck & Co., Inc., USA
- PCT Int. Appl., 281 pp. SO
 - CODEN: PIXXD2
- DT Patent
- LA English

FAN.							_											
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		DW.									MD, AT,				שת	שמ	ъc	
		KW:									PT,							
								MR,				JI,	DI,	ъ,	CI,	co,	CI,	
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GB 1998-958

A 19980116

WO 1998-US14990 W 19980721

OS MARPAT 130:168242

IT 220392-83-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 1-(4-sulfonamidobutyl)piperidines and related compds. as modulators of chemokine receptor activity)

RN 220392-83-6 CAPLUS

CN Benzenesulfonamide, N-methyl-N-[4-[4-[[[(methylamino)carbonyl]oxy]methyl]-4-phenyl-1-piperidinyl]-2-phenylbutyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Ph} & \text{O} = \text{S-Ph} \\ \text{O} & \text{S-Ph} \\ \text{O} & \text{I} \\ \text{MeNH-C-O-CH}_2 & \text{N-Me} \\ \end{array}$$

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

AB Disclosed are topical film-forming compns. for the prevention and treatment of pruritus containing an opiate that is substantially devoid of central nervous system effects. A topical preparation contained loperamide HCl 25, Na carrageenan 25, Ca lactate 32, and water to 100 %.

AN 1999:77462 CAPLUS

DN 130:158399

TI Film-forming compositions of antihyperalgesic opiates and method of treating hyperalgesic and pruritic conditions therewith

IN Farrar, John J.; Maycock, Alan L.; Kumar, Virendra; Balogh, Imre

PA Adolor Corporation, USA

SO PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

	PATENT	NO.			KIN	D :	DATE			APPL	ICAT	ION :	NO.		D	ATE		
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ΡI	WO 9903	3455			A1		1999	0128	,	WO 1	998-1	US12	834		1:	9980	619 <	
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WO 1997-US3315 W 19970226

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US 1996-614027 A2 19960312
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CM, GA, GN, ML, MR, NE, SN, TD, TG A 19970714 US 1997-891924 AU 9880749 Α1 19990210 AU 1998-80749 19980619 AU 728538 20010111 US 1997-891924 Α 19970714 WO 1998-US12834 19980619 EP 1003489 **A**1 20000531 EP 1998-929109 19980619 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI US 1997-891924 19970714 Α WO 1998-US12834 19980619 JP 2001510152 T2 20010731 JP 2000-502756 19980619 US 1997-891924 19970714 WO 1998-US12834 19980619 NO 9906351 20000310 NO 1999-6351 19991220 US 1997-891924 19970714 WO 1998-US12834 19980619

os MARPAT 130:158399

IT 189024-73-5 189024-74-6 189024-80-4

189024-83-7 189024-84-8

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (topical compns. containing opiates and film-forming polymers for treatment of pruritic and hyperalgesic conditions)

RN189024-73-5 CAPLUS

CN 4-Piperidinemethanol, 4-phenyl-1-(3,3,3-triphenylpropyl)-, acetate (ester) (9CI) (CA INDEX NAME)

RN 189024-74-6 CAPLUS

CN Piperidine, 4-(methoxymethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO-CH}_2 & \text{CH}_2 - \text{CH}_2 - \text{CPh}_3 \\ \\ \text{Ph} & \end{array}$$

RN 189024-80-4 CAPLUS

CN Piperidine, 4-[(hexyloxy)methyl]-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

Me-
$$(CH_2)_5$$
-0- CH_2
Ph

RN 189024-83-7 CAPLUS

CN Piperidine, 4-(2-methoxyethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO-CH}_2\text{-CH}_2\text{-CPh}_3 \\ \text{Ph} \end{array}$$

RN 189024-84-8 CAPLUS

CN Pyridine, 2-[3-[4-(2-methoxyethyl)-4-phenyl-1-piperidinyl]-1,1-diphenylpropyl]- (9CI) (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

AB Anti-pruritic compns. and methods of using the compns. for the prevention or treatment of pruritus comprising opiates in a pharmaceutically acceptable carrier. The mean anti-pruritic activity of 1-[3,3-diphenyl-3-(2-pyridyl)propyl]-4-phenyl-4-piperidinecarboyxlic acid hydrochloride at 10.0 mg/kg s.c. in rats was 83%. Formulation of different pharmaceutical dosage forms are also disclosed.

AN 1998:816107 CAPLUS

DN 130:47476

TI Peripherally acting anti-pruritic opiates

IN Farrar, John J.; Cowan, Alan

PA Adolor Corporation, USA

SO U.S., 15 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 3

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	11, 55			US 1998-168724	7 19991009
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	A0 9932300	AI A	20000301	US 1998-168724	7 19991002
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os	MARPAT 130:47476			WO 1999-0517439	W 19990002
IT	189024-73-5 189024-	74_6 1890	024-80-4		
	189024-83-7 189024-		024-00-4		
			v or effect	or, except adverse);	BSII (Biological
	study unclassified	1) · THII (Therapeutic	use); BIOL (Biologi	cal study). HERC
	(Uses)	1), 1110 (.	inerapeutit	use), BIOD (BIOLOGI	car scudy,; USES
	(peripherally ac	rting anti	i-pruritic	oniates)	
RN	189024-73-5 CAPLUS		· pruriere	opiaces/	
CN			nv1-1-(3.3	3-triphenylpropyl)-	acetate (ester)

4-Piperidinemethanol, 4-phenyl-1-(3,3,3-triphenylpropyl)-, acetate (ester) CN(9CI) (CA INDEX NAME)

RN189024-74-6 CAPLUS

CNPiperidine, 4-(methoxymethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{MeO-CH}_2 \\ \text{Ph} \end{array}$$

RN 189024-80-4 CAPLUS

CN Piperidine, 4-[(hexyloxy)methyl]-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

Me-
$$(CH_2)_5$$
-O- CH_2 - CH_2 - CH_2 - CPh_3

RN 189024-83-7 CAPLUS

CN Piperidine, 4-(2-methoxyethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \operatorname{MeO-CH_2-CH_2-CPh_3} \\ \end{array}$$

RN 189024-84-8 CAPLUS

CN Pyridine, 2-[3-[4-(2-methoxyethyl)-4-phenyl-1-piperidinyl]-1,1-diphenylpropyl]- (9CI) (CA INDEX NAME)

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

AB Previously reported studies from these labs. described the design of a novel series of high-affinity NK1 antagonists based on the 4,4-disubstituted piperidine ring system. Further structure-activity studies have now established that for high NK1 affinity the benzyl ether side chain must be 3,5-disubstituted and highly lipophilic, the optimal side chain being the 3,5-bis(trifluoromethyl)benzyl ether, 12 (hNK1 IC50 = 0.95 nM). Addnl. studies have shown that this class of NK1 antagonist

tolerates a wider range of substituents on the piperidine nitrogen, including acyl (hNK1 IC50 = 5.3 nM) and sulfonyl (hNK1 IC50 = 5.7 nM) derivs. Following preliminary pharmacokinetic anal., two compds. were selected for in vivo study in the resiniferotoxin-induced vascular leakage model, both showing excellent profiles (ID50 = 0.22 and 0.28 mg/kg, resp.).

AN 1998:642712 CAPLUS

DN 130:32676

TI 4,4-Disubstituted Piperidine High-Affinity NK1 Antagonists: Structure-Activity Relationships and in Vivo Activity

AU Stevenson, Graeme I.; Huscroft, Ian; MacLeod, Angus M.; Swain, Christopher J.; Cascieri, Margaret A.; Chicchi, Gary G.; Graham, Michael I.; Harrison, Timothy; Kelleher, Fintan J.; Kurtz, Marc; Ladduwahetty, Tamara; Merchant, Kevin J.; Metzger, Joseph M.; MacIntyre, D. E.; Sadowski, Sharon; Sohal, Balbinder; Owens, Andrew P.

CS Department of Medicinal Chemistry Neuroscience Research Centre, Merck Sharp and Dohme Research Laboratories, Harlow Essex, CM20 2QR, UK

SO Journal of Medicinal Chemistry (1998), 41(23), 4623-4635 CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

IT 160377-06-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(structure-activity relationships and in vivo activity of 4,4-disubstituted piperidine high-affinity antagonists)

RN 160377-06-0 CAPLUS

CN Piperidine, 4-[[[3,5-bis(trifluoromethyl)phenyl]methoxy]methyl]-4-phenyl-1-(2-phenylethyl)-, 4-methylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 160376-11-4 CMF C29 H29 F6 N O

$$\begin{array}{c|c} \text{F}_3\text{C} & \text{Ph} \\ \hline \\ \text{CH}_2-\text{O-CH}_2 & \text{Ph} \\ \hline \\ \text{CH}_2-\text{CH}_2-\text{Ph} \\ \end{array}$$

CM 2

CRN 104-15-4 CMF C7 H8 O3 S L20

RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 9 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

AB Topical anti-hyperalgesic film-forming compns. and methods of using compns. for the treatment of peripheral hyperalgesia comprise (a) antihyperalgesic opiates; (b) a film-forming polymeric material; and (c) an aqueous pharmaceutically acceptable carrier. A pharmaceutical composition contained loperamide. HCl 25.0, sodium carrageenan 25.0, calcium lactate 32.0, and water q.s. 100.0%. 1997:616927 CAPLUS AN 127:283391 DN Pharmaceutical compositions containing film-forming antihyperalgesic TΙ opiates for treatment of hyperalgesic conditions IN Farrar, John J.; Maycock, Alan L.; Kumar, Virendra; Balogh, Imre PΑ Adolor Corp., USA SO U.S., 11 pp. CODEN: USXXAM DT Patent LA English FAN.CNT 3 PATENT NO. KIND DATE APPLICATION NO. DATE -------**-**-----------US 1996-614027 PΙ US 5667773 Α 19970916 19960312 <--CA 2223514 AA 19970918 CA 1997-2223514 19970226 <--CA 2223514 С 20041026 A 19960312 US 1996-614027 WO 9733634 A1 19970918 WO 1997-US3315 19970226 <--W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE US 1996-614027 A 19960312 AII 9719847 AU 1997-19847 **A**1 19971001 19970226 <--AU 715912 B2 20000210 US 1996-614027 A 19960312 W 19970226 WO 1997-US3315 EP 888141 EP 1997-907990 A1 19990107 19970226 <--EP 888141 В1 20040526 R: DE, FR, GB A 19960312 US 1996-614027 WO 1997-US3315 W 19970226 US 5888494 19990330 US 1997-891924 19970714 <--US 1996-614027 A2 19960312 PATENT FAMILY INFORMATION: FAN 1999:77462 PATENT NO. KIND DATE APPLICATION NO. DATE --------------------------

19990128 WO 1998-US12834

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19980619

WO 9903455

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                                19970916
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                                           CA 1998-2288204
    CA 2288204
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                                                            19980619
A 19970714
W 19980619
19980619
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                                            WO 1998-US12834
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    WO 9903455
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             PL, RO, SG, SI, SK, SL, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, ML, MR, NE, SN, TD, TG
                                           US 1997-891924
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            IE, FI
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                                                             W 19980619
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WO 1998-US12834 W 19980619

IT 189024-73-5 189024-74-6 189024-80-4

189024-83-7 189024-84-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical compns. containing film-forming antihyperalgesic opiates for treatment of hyperalgesic conditions)

RN189024-73-5 CAPLUS

CN4-Piperidinemethanol, 4-phenyl-1-(3,3,3-triphenylpropyl)-, acetate (ester) (9CI) (CA INDEX NAME)

RN189024-74-6 CAPLUS

CN Piperidine, 4-(methoxymethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO-CH}_2 & \text{CH}_2\text{--CPh}_3 \\ \text{Ph} & \end{array}$$

RN 189024-80-4 CAPLUS

CN Piperidine, 4-[(hexyloxy)methyl]-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me-} (\text{CH}_2) & \text{5-} \text{O-} \text{CH}_2 \\ \end{array}$$

RN189024-83-7 CAPLUS

CN Piperidine, 4-(2-methoxyethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO-CH}_2\text{-CH}_2\text{-CPh}_3 \\ \text{Ph} \end{array}$$

RN 189024-84-8 CAPLUS

CN Pyridine, 2-[3-[4-(2-methoxyethyl)-4-phenyl-1-piperidinyl]-1,1-diphenylpropyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Ph} & \\ \hline & \text{C} \\ & \text{C} \\ & \text{Ph} \end{array}$$

L20 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN GI

$$\begin{array}{c} \text{Y} \\ \text{NCH}_2\text{CH}_2\text{CRAr}^1\text{CH}_2\text{NR}^2\text{TAZ} \\ \text{Ar}^2\left(\text{CH}_2\right)_{\mathfrak{m}} \end{array}$$

ΙI

AB Piperidines I [R1 = H, R2 = H, alkyl; R1R2 = (CH2)nQ; Q = CO, CH2; n = 1-3; m = 0, 1; Y= (un)substituted alkyl, OH, NH2, CONH2, thiazolyl; Ar1 == (un)substituted Ph, thienyl, benzothienyl, naphthyl, indolyl, imidazolyl, pyridyl, biphenyl; Ar2 = (un)substituted Ph, pyridyl, pyrimidyl, thienyl, imidazolyl; T = CH2, CO, (un)substituted CONH, CO2; A = CH2, CH2CH2; Z = (un)substituted aromatic, heteroarom.] were prepared for use in the treatment of neurokinin- and substance P-dependent diseases (no data). Thus, piperidine II was prepared from HOCH2CH2CH(C6H3Cl2-3,4)CH2NH2 by conversion to the N-methylbenzamide, benzenesulfonylation, amination with 4-(2-hydroxyethyl)-4-phenylpiperidine (III), and acetylation. III was obtained from 1-benzyl-4-hydroxy-4-phenylpiperidine by benzoylation, reaction with ethylene glycol, and debenzylation.

AN 1997:374707 CAPLUS

DN 126:343496

TI Preparation of piperidine derivatives as neurokinin antagonists

IN Chabert, Nathalie; Emonds Alt, Xavier; Proietto, Vincenzo; Ducoux, Jean Philippe; Gueule, Patrick; Van Broeck, Didier

PA Sanofi, Fr.

SO Fr. Demande, 96 pp.

CODEN: FRXXBL

DT Patent LA French

FAN.CNT 1

FAN.	CNT I				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2738245	A1	19970307	FR 1995-10142	19950828 <
	FR 2738245	B1	19971121	an 1006 1000	1006000
	GB 2304714 GB 2304714	A1 B2	19970326 19990915	GB 1996-17893	19960828 <
				FR 1995-10142 A	19950828
	BE 1009571	A3	19970506	BE 1996-723	19960828 <
				FR 1995-10142 A	19950828
	JP 09124600	A2	19970513	JP 1996-227222	19960828 <
				FR 1995-10142 A	19950828
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				FR 1995-10142 A	19950828
	CH 690437	Α	20000915	CH 1996-2120	19960828 <
				FR 1995-10142 A	19950828
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				FR 1995-10142 A	19950828
				US 1996-703952 A	3 19960828
	US 5965580	Α	19991012	US 1998-35823	19980306 <
				FR 1995-10142 A	19950828
				US 1996-703952 A	3 19960828

OS MARPAT 126:343496

IT 189877-29-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of aminoalkylpiperidines as neurokinin antagonists)

RN 189877-29-0 CAPLUS

CN Carbamic acid, ethyl-, [1-[4-(benzoylamino)-3-(3,4-dichlorophenyl)butyl]-4phenyl-4-piperidinyl]methyl ester, monohydrochloride (9CI) (CA INDEX
NAME)

HCl

L20 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN

AB Compns. and methods using the compns. for treatment of peripheral hyperalgesia are provided. The compns. contain an anti-hyperalgesia effective amount of one or more compds. that directly or indirectly interact with peripheral opiate receptors, but that do not, upon topical or local administration, elicit substantial central nervous system effects. The anti-diarrheal compound loperamide-HCl is preferred for use in the compns. and methods.

1997:332024 CAPLUS

AN

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DN
     126:308827
     Peripherally active anti-hyperalgesic opiates
ΤI
     Yaksh, Tony L.; Farrar, John J.; Maycock, Alan L.; Lewis, Michael E.; Dow,
IN
PΑ
     Regents of the University of California, USA; Adolor Corporation
so
     PCT Int. Appl., 317 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 3
                      KIND DATE APPLICATION NO.
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                        A2
                              19970320 WO 1996-US14727
                                                              19960912 <--
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            AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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            IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG
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                        Α
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     CA 2229814
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    JP 11512438
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                                          WO 1996-US14727
PATENT FAMILY INFORMATION:
FAN 1999:761526
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                                         APPLICATION NO.
                                                               DATE
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PΙ
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                                                              19950912
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	JP 2002069004	A2	20020308	JP 2001-224729		19960912
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	US 6573282	B1	20030603	US 1999-374634		19990816
				US 1995-528510	A2	19950912
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FAN	2003:429099					
	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
ΡI	US 6573282	B1	20030603	US 1999-374634		19990816
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				US 1996-712881		19960912
	****	_		US 1998-199873	A2	19981124
	US 5849761	A	19981215	US 1995-528510		19950912
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os	MARPAT 126:308827					
IT	189024-73-5 189024	-74-6 18	39024-80-4			

189024-83-7 189024-84-8

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (peripherally active anti-hyperalgesic opiates)

189024-73-5 CAPLUS

RN 4-Piperidinemethanol, 4-phenyl-1-(3,3,3-triphenylpropyl)-, acetate (ester) CN(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{CH}_2-\text{CH}_2-\text{CPh}_3 \\ \text{Ph} \end{array}$$

RN189024-74-6 CAPLUS

Piperidine, 4-(methoxymethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) CN (CA INDEX NAME)

RN 189024-80-4 CAPLUS
CN Piperidine, 4-[(hexyloxy)methyl]-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI)
(CA INDEX NAME)

Me-
$$(CH_2)_5$$
-O- CH_2

Ph

RN 189024-83-7 CAPLUS

CN Piperidine, 4-(2-methoxyethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO-CH}_2\text{-CH}_2\text{-CPh}_3 \\ \\ \text{Ph} \end{array}$$

RN 189024-84-8 CAPLUS

CN Pyridine, 2-[3-[4-(2-methoxyethyl)-4-phenyl-1-piperidinyl]-1,1-diphenylpropyl]- (9CI) (CA INDEX NAME)

L20 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN GI

$$R^4$$
 R^5 R^6 R^7 R^2 R^2 R^2 R^3 R^3 R^3 R^3 R^4 R^5 R^6 R^7 R^7

AB Title compds. [I; m = 2-4; n = 0-2 when m = 2 or 3, and n = 0 or 1 when m = 4; X = 0, S; R1 = (substituted) Ph; R2 = (substituted) Ph, indazolyl, thienyl, furyl, pyridyl, thiazolyl, tetrazolyl, quinolyl, benzhydryl, benzyl; R3 = H, COR9, COZR10, COCONR10R11, COCO2R10, SO2R15, CONR10SO2R15, (substituted) alkyl, Ph; R4-R7 = H, alkyl; R9 = H, alkyl, Ph; R10, R11 = H, alkyl; R15 = alkyl, CF3, (substituted) Ph], were prepared Thus, 4-phenyl-4-carboxypiperidine tosylate was reduced with LiAlH4 in THF and the product was treated with di-tert-Bu dicarbonate to give 1-tert-butoxycarbonyl-4-phenyl-4-hydroxymethylpiperidine. The latter was stirred with 3,5-bistrifluoromethylbenzyl bromide and NaH in DMF to give title compound II. I showed IC50 at NKIR of <500 nM.

AN 1995:304898 CAPLUS

DN 122:81123

TI Preparation of 4-(arylmethyloxymethyl)piperidines as tachykinin antagonists.

IN Harrison, Timothy; Macleod, Angus Murray; Stevenson, Graeme Irvine;
Williams, Brian John

PA Merck Sharp and Dohme Ltd., UK

SO PCT Int. Appl., 89 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
PI	WO 9410165 W: AU, CA, JP,	A1 19940511 US	WO 1993-GB2214	19931027 <
	RW: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IE, IT, LU,	MC, NL, PT, SE
			GB 1992-22633	A 19921028
			GB 1993-8962	A 19930430
			GB 1993-13680	A 19930702
			GB 1993-16112	A 19930804
	CA 2146767	AA 19940511	CA 1993-2146767	19931027 <
			GB 1992-22633	A 19921028
			GB 1993-8962	A 19930430
			GB 1993-13680	A 19930702
			GB 1993-16112	A 19930804
			WO 1993-GB2214	W 19931027
	AU 9453429	A1 19940524	AU 1994-53429	19931027 <
	AU 678409	B2 19970529		
			GB 1992-22633	A 19921028
			GB 1993-8962	A 19930430
			GB 1993-13680	A 19930702

EP 666856	A1	19950816	GB 1993-16112 WO 1993-GB2214 EP 1993-923630		19930804 19931027 19931027	.			
EP 666856	B1	20000105	EP 1993-923030		19931027	\			
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K. AI, DE,	CII, DII, DI	, BD, IR,	GB 1992-22633		19921028				
			GB 1993-8962		19930430				
			GB 1993-13680		19930702				
			GB 1993-16112		19930804				
			WO 1993-GB2214		19931027				
JP 08502510	T2	19960319	JP 1993-510825	••	19931027	<			
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AT 188472	E	20000115	AT 1993-923630		19931027	<			
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			GB 1993-8962	Α	19930430				
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US 5620989	Α	19970415	US 1995-416813		19950413	<			
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MARPAT 122:8112	-								
160376-11-4P 160377-06-0P									

os

IT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of, as tachykinin antagonist)

RN 160376-11-4 CAPLUS

CN Piperidine, 4-[[[3,5-bis(trifluoromethyl)phenyl]methoxy]methyl]-4-phenyl-1-(2-phenylethyl) - (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{F}_3\text{C} \\ \\ \text{CH}_2-\text{O}-\text{CH}_2 \\ \\ \text{CF}_3 \end{array} \qquad \begin{array}{c} \text{Ph} \\ \\ \text{CH}_2-\text{CH}_2-\text{Ph} \\ \\ \end{array}$$

RN · 160377-06-0 CAPLUS

CNPiperidine, 4-[[[3,5-bis(trifluoromethyl)phenyl]methoxy]methyl]-4-phenyl-1-(2-phenylethyl)-, 4-methylbenzenesulfonate (9CI) (CA INDEX NAME)

CM 1 CRN 160376-11-4 CMF C29 H29 F6 N O

$$\begin{array}{c|c} \text{F}_3\text{C} & \text{Ph} \\ \hline \\ \text{CH}_2\text{--}\text{O}\text{--}\text{CH}_2 & \text{Ph} \\ \hline \\ \text{CF}_3 & \text{CH}_2\text{--}\text{CH}_2\text{--}\text{Ph} \\ \end{array}$$

CM 2

CRN 104-15-4 CMF C7 H8 O3 S

L20 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN GI

$$\begin{array}{c} & & & \text{Cl} \\ & & & \text{Cl} \\ & & & \text{Cl} \\ & & & \text{NT (CH2)}_{qZ} \\ & & & & \\ & & & \\ & & & & \\ &$$

Title compds. [I; R = Ph, (benzo)thienyl, naphthyl, indolyl, etc.; T, Z1 = C0, CH2; Y = NR1, CX(CH2)xR2; R1 = Ph, PhCH2, cycloalkyl(methyl), pyridyl(methyl), etc.; R2 = Ph, pyridyl, thienyl; X = H, OH, alkoxy, acyloxy, CO2H, etc.; Z = Ph, naphthyl, pyridyl, thienyl, etc.; n, q = 0-3; p = 1, 2; x = 0, 1] were prepared Thus, 3,4-Cl2C6H3CH2CN was condensed with 2-(2-bromoethoxy)tetrahydropyran and the product condensed with BrCH2CH2CO2Et to give, after cyclization and reduction, piperidine II (R3 = H, R4 = tetrahydropyranyloxy) which was N-acetylated with PhCH2CO2H and the product converted to II (R3 = COCH2Ph) (III; R4 = OSO2Me). The latter was condensed with 4-benzylpiperidine to give III (R4 = 4-benzylpiperidino) which had Ki of 8.3 nM for antagonism of substance P binding in vitro.

AN 1993:124405 CAPLUS

DN 118:124405

- Preparation of 1-aralk(ano)yl-3-aryl-3-(piperidinoalkyl)piperidines and ΤI analogs as substance P and neurokinin antagonists
- Goulaouic, Pierre; Emonds-Alt, Xavier; Gueule, Patrick; Proietto, Vincenzo Elf Sanofi SA, Fr. IN
- PA
- Eur. Pat. Appl., 75 pp. so

CODEN: EPXXDW

Patent DT

DT	Patent								
LA	French								
FAN.	CNT 1								
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ΡI	EP 512901		A1		EP	1992-401235		19920430	<
	EP 512901		B1	19990623					
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	ZA 9203178		A	19930127		1992-3178		19920430	
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	F1 101230		B1	19980529					

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HK :	1005138	A1	20000512	ΗK	1998-104344		19980519	<
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OS MARPAT 118:124405

146395-92-8P

IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, in preparation of neurokinin and substance P antagonists)

RN 146395-92-8 CAPLUS

CN 4-Piperidineethanol, 4-(3-methylphenyl)-1-(triphenylmethyl)-,
methanesulfonate (ester) (9CI) (CA INDEX NAME)

L20 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN GI

$$R^{1}R^{2}R^{3}C(Q)N$$

CH₂OR

X

AB The title compds. I [R = H, C1-4 alkyl, C2-5 alkanoyl; R1, R2, R3 = Ph, C1-4 alkylphenyl, halophenyl, pyridyl, thienyl, X = H, halo, C1-4 alkyl, Q = CH2CH2, CHMeCH2, (CH2)3], useful in treatment of diarrhea, were prepared by reduction of the corresponding piperidinecarboxylic acids with a variety of hydrides. Thus, Ph3CCH2COCl, prepared from Ph3COH and CH2(CO2H)2, treated with 4-phenyl-4-piperidinecarboxylic acid in C6H6 containing Et3N followed by reduction with LiAlH4 2.5 h in refluxing ether gave I (R = X = H, R1 = R2 = R3 = Ph, Q = CH2CH2) as its hydrochloride.

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ΑN
     1981:30573 CAPLUS
DN
     94:30573
ΤI
     1-(3,3,3,-Triarylpropyl)-4-phenyl-4-piperidinemethanols
IN
     Adelstein, Gilbert W.; Dajani, Esam Z.; Yen, Chung H.
PΑ
     G. D. Searle & Co. of Canada Ltd., Can.
so
     Can., 38 pp.
     CODEN: CAXXA4
DT
     Patent
    English
LA
FAN.CNT 1
     PATENT NO.
                        KIND
                               DATE
                                           APPLICATION NO.
                                                                 DATE
                                           -----
                         _ _ _ _
                               _____
                                                                  _____
PΙ
     CA 1079734
                         A1
                               19800617
                                           CA 1976-250373
                                                                  19760415 <--
                                           CA 1976-250373
                                                              A5 19760415A A
     61532-48-7P
IT
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and diarrhea treatment by)
    61532-48-7 CAPLUS
Piperidine, 1-[3,3-diphenyl-3-(2-thienyl)propyl]-4-(methoxymethyl)-4-
RN
CN
    phenyl-, ethanedioate (9CI) (CA INDEX NAME)
     CM
         1
    CRN 61532-47-6
     CMF C32 H35 N O S
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CM 2

CRN 144-62-7 CMF C2 H2 O4

IT 61532-44-3P 61532-45-4P

RN 61532-44-3 CAPLUS

CN 4-Piperidinemethanol, 4-phenyl-1-(3,3,3-triphenylpropyl)-, acetate (ester), hydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 61532-45-4 CAPLUS

CN Piperidine, 4-(methoxymethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)-, hydrochloride (9CI) (CA INDEX NAME)

HCl

L20 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN GI

AB (Piperidinoalkyl)oxadiazoles I (R = H, alkyl, alkanoyl; R1 = H, halo, alkyl, CF3; Z = C1-4 alkylene; Z1 = linear or branched C2-4 alkylene; R2

and R3 are independently Ph, alkylphenyl, halophenyl, pyridyl; R4 = H, alkyl), which showed anti-diarrhea activity, were prepared from N-(ω -cyanoalkyl)piperidines. 4-(4-Hydroxymethyl-4-phenyl-1-piperidinyl)-2,2-diphenylbutyronitrile reacted with NaN3 and the tetrazole derivative obtained was heated with Ac2O in pyridine to yield I (R = Ac, R1 = H, Z = CH2, Z1 = CH2CH2, R2 = R3 = Ph, R4 = Me).

AN 1980:446688 CAPLUS

DN 93:46688

TI 2-[[4-(Hydroxymethyl)-1-piperidinyl]alkyl]-1,3,4-oxadiazoles

IN Adelstein, Gilbert W.

PA G.D. Searle and Co., USA

SO U.S., 6 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 4194045	Α	19800318	US 1977-864989	19771227 <
				US 1977-864989 A	19771227

IT 74173-97-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and saponification of)

RN 74173-97-0 CAPLUS

CN 4-Piperidinemethanol, 1-[3-(5-methyl-1,3,4-oxadiazol-2-yl)-3,3-diphenylpropyl]-4-phenyl-, acetate (ester) (9CI) (CA INDEX NAME)

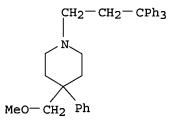
L20 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN GI

$$\mathbb{R}^2$$
 $\mathbb{C}^{\mathbb{R}^4}\mathbb{Z}^{\mathbb{N}}$
 \mathbb{R}^1

AB The title compds. [I; Z = C2-4 alkylene; R = H, alkyl, acyl; R1-R3 = H,

alkyl, Cl; R4 = (substituted) Ph, pyridyl, thienyl) and their salts were prepared and tested as analgesics and antidiarrheal agents. Thus, Ph3CCH2COCl reacted with 4-phenylpiperidinecarboxylic acid, and the product was reduced with LiAlH4 to give I (R-R3 = H, R4 = Ph, Z = CH2CH2). AN 1980:408031 CAPLUS DN 93:8031 1-(Triarylalkyl)-4-phenyl-4-piperidinomethanol derivatives TI PΑ G.D. Searle and Co., USA SO Pol., 6 pp. CODEN: POXXA7 DTPatent LΑ Polish FAN.CNT 1 PATENT NO. APPLICATION NO. KIND DATE DATE --------------19791031 PL 1976-188845 19760416 <--PL 1976-188845 A 19760416 PΙ PL 105435 IT 61532-45-4P 61532-47-6P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of) RN61532-45-4 CAPLUS Piperidine, 4-(methoxymethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)-, CN hydrochloride (9CI) (CA INDEX NAME)

. .



HCl

RN 61532-47-6 CAPLUS
CN Piperidine, 1-[3,3-diphenyl-3-(2-thienyl)propyl]-4-(methoxymethyl)-4-phenyl- (9CI) (CA INDEX NAME)

L20 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN GI

AB The title compds. (I) (R = Ph, pyridyl; R1 = C5-10 alkyl; R2 = H, halogen, Me; Z = C2-4 alkylene) and their salts were prepared Thus, Ph3COH was heated with H2C(CO2H)2 to give Ph3CCH2CO2H, which was converted into the acid chloride. Et 4-phenyl-4-piperidinecarboxylate was treated with Ph3CCH2COCl and LiAlH4, followed by treatment with Me(CH2)5Br and NaOH to give I (R = Ph, R1 = hexyl, R2 = H, Z = CH2CH2). I had antidiarrheal action, as shown by animal tests.

AN 1978:424166 CAPLUS

DN 89:24166

TI 1-(3,3,3-Triarylpropyl)-4-phenyl-4-piperidinemethanol ether

IN Adelstein, Gilbert William; Dajani, Esam Zafer; Yen, Chung Hwai

PA G.D. Searle and Co., USA

SO Ger. Offen., 14 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 3

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ΡI	DE 2746574	A1	19780420	DE 1977-2746574	19771017 <
				US 1976-733502 A	19761018
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	65 403204	A2	19/00/10	US 1976-733502	Α	
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	211 7700103	-	13701123	US 1976-733502	А	
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	AU 7729802	A1	19790426			
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FAN	1977:43574 PATENT NO. DE 2616616 US 3998832 ZA 7601681 NL 7603641 DK 7601739 DK 7601747 NO 7601303 NO 7601304 ES 447010 ES 447011	KIND A1 A A A A A A A A A A A A A A A A	19761028 19761028 19761221 19770427 19761019 19761017 19761019 19761019 19771001 19771116	APPLICATION NO. DE 1976-2616616 US 1975-568439 US 1975-568439 ZA 1976-1681 US 1975-568439 NL 1976-3641 US 1975-568439 DK 1976-1739 US 1975-568439 DK 1976-1747 US 1975-568439 NO 1976-1303 US 1975-568439 NO 1976-1304 US 1975-568439 ES 1976-447010 US 1975-568439 ES 1976-447011 US 1975-568439	A A A A A	DATE 19760415 19750416 19750416 19760318 19750416 19760407 19750416 19760414 19750416 19760414 19750416 19760414 19750416 19760414 19750416 19760414 19750416
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FI 7601041	Α	19761017	FI 1976-1041		19760415
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668	93_44_5D						

IT

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and antidiarrheal activity of)

RN

⁶⁶⁸⁹³⁻⁴⁴⁻⁵ CAPLUS
Piperidine, 4-[(hexyloxy)methyl]-4-phenyl-1-(3,3,3-triphenylpropyl)-,
hydrochloride (9CI) (CA INDEX NAME) CN

$$\begin{array}{c} \text{CH}_2-\text{CH}_2-\text{CPh}_3 \\ \\ \text{N} \\ \\ \text{Me}-\text{(CH}_2)_5-\text{O}-\text{CH}_2 \text{ Ph} \end{array}$$

● HCl

L20 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN GI

AB Piperidinemethanol derivs. (I; R = Ph, 2-pyridinyl, 2-thienyl; R1 = H, Ac, Me; R2 = H, Cl), useful as diarrhea inhibitors, are prepared by standard methods. Thus, reaction of Ph3COH with CH2(CO2H)2 gives Ph3CCH2CO2H which is converted to Ph3CCH2COCl (II). Reaction of II with Et 4-phenyl-4-piperidinecarboxylate gives Et 4-phenyl-1-(3,3,3-triphenylpropionyl)-4-piperidinecarboxylate which on reduction with LiAlH4 gives I (R = Ph, R1 = R2 = H).

AN 1977:43574 CAPLUS

DN 86:43574

TI 1-(Triarylalkyl)-4-phenylpiperidine derivatives

IN Adelstein, Gilbert W.; Dajani, Esam Z.; Yen, Chung Hwai

PA G.D. Searle and Co., USA

SO Ger. Offen., 28 pp.

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 3

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	PATENT NO. DE 2616619 US 3998832 ZA 7601681 NL 7603641 DK 7601739 DK 7601747 NO 7601303	A1 A A A A A	19761028 19761221 19770427 19761019 19761017 19761017	DE 1976-2616619 US 1975-568439 US 1975-568439 ZA 1976-1681 US 1975-568439 NL 1976-3641 US 1975-568439 DK 1976-1739 US 1975-568439 DK 1976-1747 US 1975-568439 NO 1976-1303 US 1975-568439 NO 1976-1304 US 1975-568439 ES 1976-447010	A A A A	19760415 19750416 19750416 19760318 19750416 19760407 19750416 19760414 19750416 19760414 19750416 19760414	
	PATENT NO. DE 2616619 US 3998832 ZA 7601681 NL 7603641 DK 7601739 DK 7601747 NO 7601303 NO 7601304	A1 A A A A A A	19761028 19761221 19770427 19761019 19761017 19761019 19761019	DE 1976-2616619 US 1975-568439 US 1975-568439 ZA 1976-1681 US 1975-568439 NL 1976-3641 US 1975-568439 DK 1976-1739 US 1975-568439 DK 1976-1747 US 1975-568439 NO 1976-1303 US 1975-568439 NO 1976-1304 US 1975-568439	A A A A	19760415 19750416 19750416 19750416 19750416 19760407 19750416 19760414 19750416 19760414 19750416 19760414 19750416	
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	PATENT NO. DE 2616619 US 3998832 ZA 7601681 NL 7603641 DK 7601739 DK 7601747 NO 7601303 NO 7601304 ES 447010	A1 A A A A A A A A A A A A A	19761028 19761221 19770427 19761019 19761017 19761019 19761019 19771001	DE 1976-2616619 US 1975-568439 US 1975-568439 ZA 1976-1681 US 1975-568439 NL 1976-3641 US 1975-568439 DK 1976-1739 US 1975-568439 DK 1976-1747 US 1975-568439 NO 1976-1303 US 1975-568439 NO 1976-1304 US 1975-568439 ES 1976-447010 US 1975-568439	A A A A A	19760415 19750416 19750416 19750416 19750416 19760407 19750416 19760414 19750416 19760414 19750416 19760414 19750416 19760414 19750416 19760414 19750416	
	PATENT NO. DE 2616619 US 3998832 ZA 7601681 NL 7603641 DK 7601739 DK 7601747 NO 7601303 NO 7601304 ES 447010	A1 A A A A A A A A A A A A A	19761028 19761221 19770427 19761019 19761017 19761019 19761019 19771001	DE 1976-2616619 US 1975-568439 US 1975-568439 ZA 1976-1681 US 1975-568439 NL 1976-3641 US 1975-568439 DK 1976-1739 US 1975-568439 DK 1976-1747 US 1975-568439 NO 1976-1303 US 1975-568439 NO 1976-1304 US 1975-568439 ES 1976-447010 US 1975-568439 ES 1976-447011	A A A A A	19760415 19750416 19750416 19750416 19750416 19760407 19750416 19760414 19750416 19760414 19750416 19760414 19750416 19760414 19750416	
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				GB 1976-15542	Α	19760415
		_		US 1976-733502	Α	19761018
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	FR 2367746	A2	10700510	US 1976-733502	Α	19761018
	FR 230//40	A2	19780512	FR 1977-31343	70	19771018
	CH 614448	A	19791130	US 1976-733502 CH 1979-1753	A	19761018 19790222
	CH 014440	A	13/31130		70	
				CH 1976-4852	Α	19760415

IT 61532-44-3P 61532-45-4P 61532-48-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and diarrhea-inhibiting activity of)

RN 61532-44-3 CAPLUS

CN 4-Piperidinemethanol, 4-phenyl-1-(3,3,3-triphenylpropyl)-, acetate (ester), hydrochloride (9CI) (CA INDEX NAME)

08/02/2006

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● HCl

RN 61532-45-4 CAPLUS
CN Piperidine, 4-(methoxymethyl)-4-phenyl-1-(3,3,3-triphenylpropyl)-,
hydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 61532-48-7 CAPLUS
CN Piperidine, 1-[3,3-diphenyl-3-(2-thienyl)propyl]-4-(methoxymethyl)-4-phenyl-, ethanedioate (9CI) (CA INDEX NAME)

CM 1

CRN 61532-47-6 CMF C32 H35 N O S

CM :

CRN 144-62-7 CMF C2 H2 O4

L14 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

AB The prepn, is described of 1-(3-substituted-phenethyl) derivs, of
4-phenylisonipecotates and their acid addition compds., which are analgesics,
m-Aminophenethyl chloride-HCl (I) (9.2 g.), 10.3 g. Et
4-phenylisonipecotate carbonate (II), 14 g. NaHCO3, and 125 cc. anhydrous

4-phenylisonipecotate carbonate (11), 14 g. NaHCO3, and 125 cc. annydrou EtOH stirred and refluxed 40 hrs., the mixture concentrated in vacuo to dryness,

 $150\ \text{cc.}\ \text{H2O}$ added and the solution extracted with Et2O, the extract dried and concd,

in vacuo to give the crude free base, the base dissolved in hot anhydrous Et2O and 20% alc. HCl added, and the resulting oil washed with Et2O and dried gives 17 g. crude Et 1-(m-aminophenethyl)4-phenylisonipecotate-2HCl (III). III is purified by treating with Me2CO, triturating with EtOAC, and dissolving in 9:1 iso-PrOH-EtOAc, from which solvent crystallization proceeds

slowly; the yield is 0.5 g., m. 269-71°. Concentration of the filtrate in vacuo yields 0.05 g. III. I, m. 175-8°, is obtained in 9.75-g. yield by treating a solution of 121 g. SnCl2.2H2O and 300 cc. concentrated HCl with

25 g. m-nitrophenethyl chloride in small portions on the steam bath over 45 min., heating 60 min. further with stirring, cooling, adding 850 cc. cold 30% NaOH, extracting with ether, washing the exts. with H2O, drying and filtering the exts., adding excess 20% alc. HCl, and washing the crystals obtained at 0° with Et2O. Et 1-(m-aminophenethyl)-4-phenylisonipecotate from 1 g. III heated 1 hr. on a steam bath with 2 cc. each of glacial HOAc and Ac2O, the mixture, after standing overnight at room temperature, diluted with 25 cc. H2O and neutralized with excess NaHCO3 ppts.

Εt

1-(m-acetamidophenethyl)-4-phenylisonipecotate (IV). IV is converted to the HCl salt by treatment with HCl in anhydrous EtOH. Et 1-(m-methoxyphenethyl)-4-phenylisonipecotate (V) is prepared from 22.5 g. m-methoxyphenethyl bromide (VI), 26 g. II, 21.5 g. NaHCO3, and 300 cc. anhydrous EtOH similarly to the preparation of the base of III. V.HCl, m. 153-5°, is obtained by passing HCl gas through a solution of V in Et2O and recrystg. from Me2CO. m-Methoxyphenylacetic acid (50 g.) and 45 g. SOCl2 heated 2.5 hrs. on a steam bath, 100 cc. C6H6 added, the mixture distilled in vacuo and the C6H6 treatment and distillation repeated yields 58

g.

m-methoxyphenylacetyl chloride (VII) as an oil. VII (58 g.) and 80 cc. dioxane is added at 10 and 15° over 25 min. to 76 g. NaBH4 and 800 cc. dioxane under N, the mixture stirred 2.5 hrs. at room temperature, 250 cc. concentrated HCl and 500 cc. ice H2O added at 10 to 20° over 75 min., 250 cc. 30% NaOH and then 500 cc. H2O added, the mixture extracted with CHCl3, and the extract dried and concentrated in vacuo to dryness to give 86% m-methoxyphenethyl alcohol (VIII). VIII (38 g.) added gradually to 30 g. PBr3, the mixture heated 2 hrs. on the steam bath, ice H2O added, the product extracted with Et2O, and the extract washed with NaHCO3 solution and

then

with H2O and evaporated to dryness in vacuo gives 66% VI, an oil. The following are prepared similarly to the preparation of V.HCl: Et 1-(m-hydroxyphenethyl)-4-phenylisonipecotate-HCl, m. 174-6°, from m-phosphatophenethyl bromide (IX); Et 1-(3-chlorophenylethyl)-4-phenylisonipecotate-HCl, from m-chlorophenethyl chloride; Et 1-(m-nitrophenethyl)-4-phenylisonipecotate-HCl, from m-nitrophenethyl chloride (X). IX is prepared from m-methoxyphenethyl alc. and PBr3 as in the preparation of VI, except that the combined NaHCO3 and H2O washes are acidified to pH 3, extracted with Et2O, and the Et2O extract dried and concentrated to

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dryness. X is prepared in 25 g. yield by adding over 10 min. 10.7 g. NANO2
     in 15 cc. H2O dropwise below 10° to a mixture of 28 g.
     4-amino-3-nitrophenethyl chloride, 65 g. EtOH, and 33 g. concentrated H2SO4,
     stirring the mixture at 8 to 10° until gas evolution ceases, warming
     cautiously to 70° under reflux until the vigorous reaction at this
     temperature is over, pouring the mixture into 300 cc. ice H2O and 25 q. Na2CO3,
     acidifying and extracting with C6H6, and drying the extract and concentrating
in vacuo to
     dryness.
AN
     1960:39146 CAPLUS
     54:39146
OREF 54:7740f-i,7741a-d
ΤI
    4-Phenylisonipecotates
PA
    Merck & Co., Inc.
DT
    Patent
LA
    Unavailable
FAN.CNT 1
     PATENT NO.
                        KIND
                               DATE
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                                                                  DATE
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PΙ
    GB 817357
                               19590729
                                           GB
                                                                           <--
     855291-81-5, Isonipecotic acid, 1-(m-methoxyphenethyl)-4-phenyl-,
IT
    hydrochloride
        (preparation of)
RN
     855291-81-5 CAPLUS
     Isonipecotic acid, 1-(m-methoxyphenethyl)-4-phenyl-, hydrochloride (6CI)
CN
     (CA INDEX NAME)
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$$\begin{array}{c|c} & \text{N} & \text{CH}_2 - \text{CH}_2 \\ & \text{Ph} \end{array}$$

● HCl